

**Evidence Reports of  
Korean Medicine Treatment 2010:  
132 Randomized Controlled Trials  
(EKOM 2010)**

**The Special Committee for EBM  
The Korean Oriental Medical Society (KOMS)**

**25 December 2011**



## Executive Summary

The Korean Oriental Medical Society (KOMS) launched the Special Committee for EBM in March 2010 as a way to establish the foundations for evidence-based Korean Medicine.

This publication is intended to present the English structured abstracts of 132 of randomized controlled trials (RCTs) of Korean Medicine treatment from “Geungeojungsimui Hanuichiryo” (근거중심의 한의치료, Evidence Korean Medicine Treatment, Koonja Publishing Inc., 2011) which contains 306 abstracts of studies including non-RCT design.

[http://www.koonja.co.kr/shop/goods/goods\\_view.php?goodsno=13970](http://www.koonja.co.kr/shop/goods/goods_view.php?goodsno=13970)

The data sources of searches were 1) The Cochrane Library (CENTRAL); 2) Pubmed; 3) the database offered by Korea Institute of Oriental Medicine (KIOM, <http://oasis.kiom.re.kr>); and 4) homepage of 17 academic societies related to Korean Medicine.

Each structured abstract consists of 8 items in accordance with global standards, i.e., objectives; design; setting; participants; intervention; main outcome measures; main results; and conclusion, and 3 additional items, i.e., safety assessment in the article; abstractor’s comments; and abstractor’s name and date.

Structured abstracts were arranged in the order used in the International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD10).

We would appreciate your comments on compilation method, the contents of the structured abstracts, information on references not included in the reports, if any, and other matters.

Please send your comments to the follows:

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## 1. Project Background

Against its long history and tradition, Korean Medicine faces difficulty in standardizing and evaluating its effectiveness and safety, due to its diverse school of thoughts and their way of diagnosing. Moreover, Korean Medicine as a discipline gets criticized for the lack of scientific evidence.

While in Japan, the Special Committee for Evidence Based Medicine of the Japan Society for Oriental Medicine (JSOM) published its first report “EBM in Kampo 2002, Internal report (*Nihon Toyo Igaku Zasshi (Journal of Japanese Oriental Medicine)* 2002; 53(5), supplement issue) in September 2002,. Since then it has been actively publishing the reports, including the “Evidence Report of Kampo Medicine Treatment: 345 Randomized Controlled Trials” (EKAT 2010, <http://www.jsom.or.jp/medical/ebm/index.html> )

There have been no such activities within Korean Medicine. Thus, in March 2010, the Korean Oriental Medical Society (KOMS) launched the Special Committee for EBM as a way to establish the foundations for evidence-based Korean Medicine.

This is the first attempt in Korea of its kind. Over numerous trial and errors, we have made progress but there still is more up ahead. It is our hope that this effort serves as a stepping stone for further improvement as the committees become more active.

## 2. The Special Committee for EBM, Korean Oriental Medical Society (KOMS)

The Special Committee for EBM was launched in March 2010. A total of 12 members were appointed, i.e., 11 clinicians (Korean Medical Doctor: KMD) and 1 EBM expert, under the headship of its chair, Professor Ki-Ho Cho (Kyung Hee University). Its original purpose was to collect good Korean Medicine clinical papers, analyze and publish “Geungeojungsimui Hanuichiryo” (근거중심의 한의치료, Evidence Report of Korean Medicine Treatment, Koonja Publishing Inc., 2011) which contains 306 abstracts of studies including non-RCT design.

### Chairman

Ki-Ho CHO	KMD, PhD	Internal medicine
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### Vice chairman

Jin-Sung KIM	KMD, PhD	Internal medicine
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### Committee members

Ho-Yeon GO	KMD, PhD	Internal medicine
Jong-In KIM	KMD, PhD	Acupuncture and moxibustion
Ho-Jun KIM	KMD, PhD	Rehabilitation
Hae-Jung NAM	KMD, PhD	Ophthalmology, otolaryngology & dermatology
Myeong –Soo LEE	PhD	Evidence based medicine
Byung-Cheol LEE	KMD, PhD	Internal medicine
Eui- Ju LEE	KMD, PhD	Sasang constitution medicine
Gyu-Tae JANG	KMD, PhD	Pediatrician
Seong-Hun CHO	KMD, PhD	Neuropsychiatry
Jung-Hoon CHO	KMD, PhD	Gynecology

## 3. International activities of the Special Committee for EBM, KOMS

The Special Committee for EBM, Korean Oriental Medicine Society (KOMS) increased academic exchanges with the Special Committee for EBM, Japan Society for Oriental Medicine (JSOM) .

First, Special Committee for EBM, KOMS translated EKAT 2010 compiled by the Special Committee for EBM, JSOM into Korean and published it under the name

“근거중심의 한방처방” (Geungeojungsimui Hanbangcheobang, 根拠中心の漢方処方).  
Koonja Publishing Inc., in July 2011.

[http://www.koonja.co.kr/shop/goods/goods\\_view.php?goodsno=13267](http://www.koonja.co.kr/shop/goods/goods_view.php?goodsno=13267)



As second phase, thru the joint efforts between the Special Committee for EBM, KOMS and Dr. Kiichiro Tsutani (Chief Investigator, Projec of Systemaic Review of Efficasy, Safety and Efficiency of Traditional East Asian Medicine, funded by Health and Labour Sciences Research Grants of Japan (fiscal year 2010-2011) and Dr. Koki Tsuruoka (Research Contributor of the same) from Japan, the traing workshop on evidence-based medicine (EBM) was held on 19 July 2010 in Seoul, Republic of Korea. The methods of developing Evidence Repor of Kampo Treatment (EKAT) were introduced and discussions were made. Later, several meetings were held by the Special Committee for EBM, KOMS to develop Korean system. It was decided to develop Evidence Reports of “good” studies of Koream Medicine including both RCTs and non-RCTs, which will lead evidence-based Korean medicine, in Korean and translate RCT parts of it into English. The 132 RCTs were identified and translated as “Evidence Report on Korean Medicine Treatment 2010” (EKOM 2010).

#### **4. Study collection and search strategy**

##### **(1) Principles for collection of studies**

A certain principles were needed for selecting for “good” studies . Members of the Sepcial Committee deliberated and set the following principles:

First is clinical trial papers on human subjects written by Korean Oriental Medical doctors.

Second is the selction of journals. For domestic journals, we used only journals registered or to-be-registered with Hangugyeongujaedan (한국연구재단, the Korea Research Foundation, <http://www.nrf.re.kr/html/kr/>) for maintaining quality. Both online and manual searches on papers from each journal, from the first issue to present issue, were conducted. As for online search, each society’s homepage and traditional medical information portals (<http://oasis.kiom.re.kr>) were utilized.

For papers in international journals,. PubMed and the Cochrane Library (CENTRAL), were searched. Hand search period was from the first issue of the journal to the March/2010 issue.

##### **(2) Selectin of domestic journals**

A total of 17 domestic Korean Medicine journals which are published by KOMS and by subspecialty societies under KOMS were searched as listed in **Table 1**

**Table 1 Searched domestic academic journals related to Korean Medicine and number of papers**

Domestic Academic Journals related Korean Medicine	Number of Papers
<i>Journal of Korean AM-Meridian &amp; Pointology Society</i> 大韓經絡經穴學會誌	430
<i>Journal of Korean Oriental Association for Study of Obesity</i> 韓方肥滿學會誌	130
<i>Journal of Korean Oriental Medical Ophthalmology &amp; Otolaryngology &amp; Dermatology</i> 大韓韓方眼耳鼻咽喉皮膚科學會誌	705
<i>Journal of Korean Oriental Medicine</i> 大韓韓醫學會誌	2,195
<i>Journal of Korean Oriental Oncology</i> 大韓癌韓醫學會誌	125
<i>Journal of Korean Oriental Pediatrics</i> 大韓韓方小兒科學會誌	558
<i>Journal of Korean Pharmacopuncture Institute</i> 大韓藥鍼學會誌	356
<i>Journal of Oriental Medical Thermology</i> 大韓韓方體熱醫學會誌	46
<i>Journal of Oriental Neuropsychiatry</i> 大韓韓方神經精神科學會誌	503
<i>Journal of Oriental Rehabilitation Medicine</i> 韓方再活醫學科學會誌	640
<i>Journal of Sasang Constitutional Medicine</i> 四象體質醫學會誌	789
<i>Korean Journal of Oriental Internal Medicine</i> 大韓韓方內科學會誌	1,370
<i>Korean Journal of Oriental Physiology and Pathology</i> 大韓東醫生理病理學會誌	1,985
<i>The Journal of Korean Acupuncture &amp; Moxibustion Society</i> 大韓鍼灸學會誌	1,695
<i>The Journal of Oriental Chronic Diseases</i> 大韓韓方成人病學會誌	180
<i>The Journal of Oriental Obstetrics &amp; Gynecology</i> 大韓韓方婦人科學會誌	899
<i>The Korean Journal of Joongpoong</i> 大韓中風學會誌	27

### (3) Search strategy

To reduce error and increase accuracy, we conducted electronic search and manual search. And 12,653 academic papers were scollated electronically and manually from the first issue of journals to March 2010. For electronic search, each society's homepage and traditional medical

information portals, Jeontonguihakjeongbo portal (전통의학정보포털, 傳統醫學情報 portal, <http://oasis.kiom.re.kr>) were mainly utilized.

Both Pubmed and The Cochrane Library CENTRAL) were searched for international journal papers until June 2010. A total of 41 clinical trial papers were found. Search strategy appears in **Table 2**.

**Table 2 Search strategy in PubMed and the Cochrane library CENTRAL until June 2010**

	Search Terms	Result	Result Related to KOM*
PubMed	Korea and Oriental (Limit: clinical trial, human, Complementary medicine)	54	37
	Korea and Oriental (Clinical trial, ) Human (Limit: clinical trial, human)	60	33
	Korea and (Korean medicine or Oriental medicine) (Limit: clinical trial, human)	428	37
The Cochrane Library	Korea and Oriental	37	
Total			41

\* KOM: Korean Oriental Medicine

#### (4) Paper selection process

Quality assessment and paper selection of the domestical 12,653 papers and international 41 papers, total 12697 papers was conducted. Result is showed in **Fig. 1**

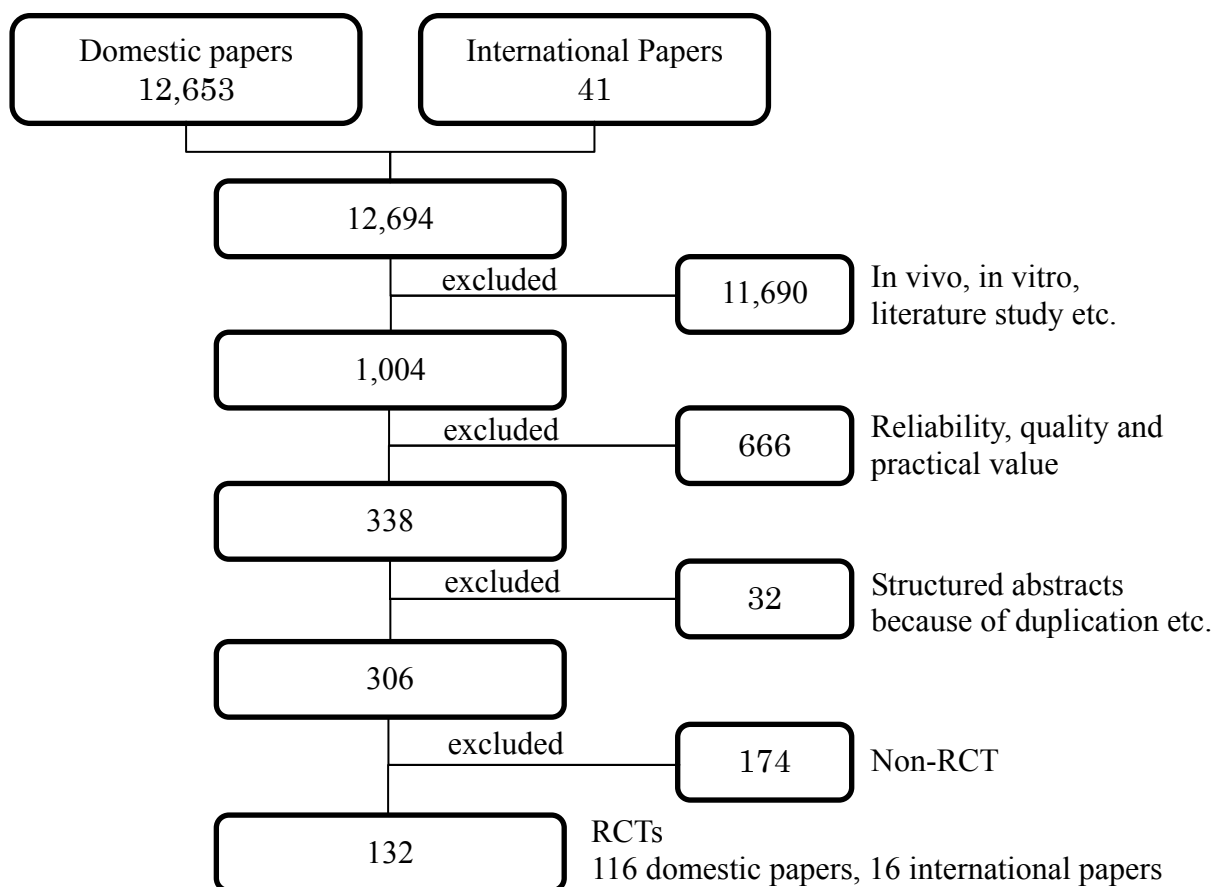
After first screening excluding in vivo, in vitro and literature review, 11,690 studies were excluded and 1,004 clinical study papers were obtained.

As second screening, each members of the Committee selected papers which are reliable, quality and and with practical value, and 666 studies were excluded, then 338 studis obtained.

As third screeing, 32 were identified as dulplaction, etc, and 306 were obtained. Structured abstracts were developed.

Finally, 306 papers were classified into 8 study design categories after much deliberation and discussion among the Committee members. Results are shown in **Table 3**. Among these, 132 RCTs papers (116 domestic papers and 16 international papers) were selected and translated into the English language.

**Fig. 1 Process of Selecting Papers**



**Table 3. Classification by Research Design\* in Selected Papers**

Design	1 <sup>st</sup> selection	2 <sup>nd</sup> selection	3 <sup>rd</sup> selection
Randomized Controlled Trial	182 (18.1)	143 (42.3)	132 (43.1)
Quasi RCT	11 (1.1)	7 (2.1)	7 (2.3)
Non-randomized controlled study	94 (9.4)	41 (12.1)	37 (12.1)
Controlled before and after study	57 (5.7)	22 (6.5)	13 (4.2)
Before and after study	366 (36.5)	89 (26.3)	92 (30.1)
Case-Control study	40 (4.0)	2 (0.6)	6 (2.0)
Case report	118 (11.8)	19 (5.6)	14 (4.6)
Etc.	136 (13.5)	15 (4.4)	5 (1.6)
Sum	1,004 (100)	338 (100)	306 (100)

\*Design classification by Deeks JJ, Dinnes J, D'Amico R, et al. Evaluating non-randomised intervention studies. *Health Technol Assess.* 2003; 7(27): iii-x, 1-173.

## 5. Disease classification of structured abstracts

Structured abstracts were arranged in the order of ICD10 (2003). When more than one ICD code was possible, the one seeming to be generally more understandable was selected. Similarly, excluded references were arranged in the order of ICD. The names of ICD chapter differ from general names and were therefore read as shown in **Table 4** to indicate them in this report.

**Table 4 ICD-10 and disease classification of structured abstracts**

ICD-10 Code	Chapter No.	Chapter Title of ICD-10	Disease Classification Names in the Reports
A00–B99	I	Certain Infectious and Parasitic Diseases	1 Infections
C00–D48	II	Neoplasms	2 Cancer
D50–D89	III	Diseases of the Blood and Blood-forming Organs and Certain Disorders involving the Immune Mechanism	3 Blood Diseases including Anaemia
E00–E90	IV	Endocrine, Nutritional and Metabolic Diseases	4 Metabolism and Endocrine Diseases
F00–F99	V	Mental and Behavioural Disorders	5 Psychiatric/Behavioral Disorders
G00–G99	VI	Diseases of the Nervous System	6 Nervous System Diseases (including Alzheimer's Disease)
H00–H59	VII	Diseases of the Eye and Adnexa	7 Eye Diseases
H60–H95	VIII	Diseases of the Ear and Mastoid process	8 Ear Diseases
I00–I99	IX	Diseases of the Circulatory System	9 Cardiovascular Diseases
J00–J99	X	Diseases of the Respiratory System	10 Respiratory Diseases (including Rhinitis)
K00–K93	XI	Diseases of the Digestive System	11 Diseases of the Digestive System
L00–L99	XII	Diseases of the Skin and Subcutaneous Tissue	12 Skin Diseases
M00–M99	XIII	Diseases of the Musculoskeletal System and Connective Tissue	13 Diseases of the musculoskeletal system and connective tissue
N00–N99	XIV	Diseases of the Genitourinary System	14 Genitourinary Tract Disorders (including Climacteric Disorders)
O00–O99	XV	Pregnancy, Childbirth and the Puerperium	15 Ante/Post-partum Diseases
P00–P96	XVI	Certain Conditions Originating in the Perinatal Period	16 Certain Conditions Originating in the Perinatal Period
Q00–Q99	XVII	Congenital Malformations, Deformations and Chromosomal Abnormalities	17 Congenital Malformations, Deformations and Chromosomal Abnormalities
R00–R99	XVIII	Symptoms, Signs and Abnormal Clinical and Laboratory Findings, not Elsewhere Classified	18 Symptoms and Signs
S00–T98	XIX	Injury, Poisoning and Certain Other Consequences of External Causes	19 Injury, Poisoning and Certain Other Consequences of External Causes
V01–Y98	XX	External Causes of Morbidity and Mortality	20 External Causes of Morbidity and Mortality
Z00–Z99	XXI	Factors Influencing Health Status and Contact with Health Services	21 Others
U00–U99	XXII	Codes for Special Purposes	22 Codes for Special Purposes

Of the total 306 abstracts, there were 57 (18.6%) of the M code musculoskeletal disorders and 55 (17.9%) of the I code cardiovascular disorders, highest in frequency. Of the RCTs from the group, 34 (25.8%) of the M code musculoskeletal disorders and 27 (20.5%) of the I code cardiovascular disorders recorded high in frequency. The illness code breakdown of papers per design would be as follows:

**Table 5 Classification by ICD 10 in 306 structured abstracts**

ICD code	Case report	Before after study	Controlled before and after study	Case control study	Cohort study	Non-randomized study	Quarsi RCT	RCT	Sum
1	A							0	0
2	B	1						0	1
3	C		1					2	3
4	D		1					1	2
5	E	1	14	3	1	2		6	27
6	F		14		1	4		1	20
7	G	3	9		3	7	1	12	35
8	H	1	1					1	3
9	I		9	4	5	8	2	27	55
10	J		4			1		4	9
11	K	2	2					7	11
12	L		4					4	8
13	M	2	8	3		7	1	35	56
14	N	3	12	1			1	10	27
15	O	1	1		1	5	2	1	11
16-17	P-Q							0	0
18	R		9	2		2		12	25
19-20	S,T		1		1			9	11
21	V-Z							0	0
22	U		1			1		0	2
	Sum	14	91	13	6	6	36	7	132
									306

## 6. Items in structured abstracts

For devising the structured abstract (SA), 8 items and 3 additional-items were selected. The 8 items are objectives, design, setting, participants, intervention, main outcome measures, main results, and conclusion. These were globally used:

Altman DG, Gardner MJ. More informative abstracts. *Ann Inter Med.* 1987;107(5):790-1”.

The 3 additional-items consist of safety assessment in the literature, abstractor’s comments, and name of abstractor and date. JSOM EKAT 2010 has a total of 12 items; 11 of the 12 are the same. Japan’s EKAT 2010, has “Kampo medicine perspective” in items.

### (1) Drafting structured abstracts

In order to devise the abstract each member of the Committee had to select papers of high quality and devise its abstract in the first stage. In the second stage, the abstract was reviewed in a group discussion and improved where needed. Finally, the abstract included and reflected recommendations of other groups before its final completion.

### (2) Editing process structured abstracts

Once all sample abstracts were gathered, the following stage were adhered. Bibliography followed the Vancouver style sheet. Two experts review the disease code and any discrepancies were discussed prior to reaching the conclusion. Then they were translated from Korean to English.

## 7. Distribution of intervention in 132 RCTs

Among 132 RCTs in Korea, RCTs utilizing acupuncture numbered the most with 64 cases, the highest in record, which was shown in **Table 6**.

**Table 6 Intervention in 132 RCTs in EKOM 2010**

Intervention	N (%)
Acupuncture	63 (47.7)
Acupuncture and etc	7 (5.3)
Acupuncture and herbal drug	1 (0.8)
Acupuncture and Moxibustion	1 (0.8)
Others (qigong, <u>Chuna manual Medicine</u> , etc)	27 (20.5)
Herbal drug	27 (20.5)
Moxibustion	6 (4.6)

## **8. Acknowledgement**

The Committee express thanks to Dr. Kiichiro Tsutani and Dr. Kouji Tsuruoka from Japan. Translation from Korean to Japanese was made in the Project of “Systematic review of Efficacy, Safety and Efficiency of Traditional East Asian Medicine” (Chief Investigator: Kiichiro Tsutani, the University of Tokyo), funded by Health and Labour Sciences Research Grants (fiscal year 2010-2011), from Ministry of Health, Labor and Welfare (MHLW) of Japan.

## **9. Contact us**

Please direct any questions on this report to the address below. Comments from the writers/authors (of papers) are welcome. Also, inform us of any omitted contents. All comments and feedback will reflect in the final report.

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kihocho58@gmail.com (Ki-Ho Cho)



## 10. Lists of Structured Abstracts

As shown in the **Table 5**, regarding the ICD10 disease classification with no RCTs found, we decided not to indicate the corresponding chapter numbers of ICD-10 and disease classification names in the list below.

Note: Original English titles assigned by authors were used in this list and the structured abstracts.

### <<Structured Abstracts describing RCTs and the References Reporting Them>>

#### 2. Cancer (2 abstracts, 2 references)

ICD-10	Research Question	Interventions	References	Study Design	Page No.
C01,07,09,11	To investigate the effects of manual acupuncture on objective and subjective symptoms in cancer patients with radiation-induced xerostomia.	Acupuncture	Cho JH, Chung WK, Kang W, et al. Manual acupuncture improved quality of life in cancer patients with radiation-induced xerostomia. <i>Journal of Alternative and Complementary Medicine</i> 2008; 14(5): 523–6.	Single blind RCT	27
C15,16,25,34,50	To investigate the effect of sweet bee venom pharmacopuncture (SBVP) on cancer-related pain.	Acupuncture Bee Venom therapy	Yoo WS, Kim JS. The effect of sweet bee venom pharmacopuncture (SBVP) on cancer-related pain: A randomized controlled trial and double blinded - pilot study. <i>Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)</i> 2008; 11(1): 2–29 (in Korean with English abstract).	Double blind RCT	28

#### 3. Blood Diseases including Anaemia (1 abstract, 1 reference)

ICD-10	Research Question	Interventions	Reference	Study Design	Page No.
D50	To evaluate the effects of Sayuktanggami-bang (四六湯加味方) on normocytic normochromic anemia.	Sayuktanggami-bang 四六湯加味方	Seo SH, Park SE, Hong SH, et al. Clinical effects of Sayuktanggami-bang on cerebral vascular accident patients with normocytic normochromic anemia. <i>Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)</i> 2005; 26(4): 795–805 (in Korean with English abstract).	RCT	29

#### 4. Metabolism and Endocrine Diseases (6 abstracts, 6 references)

ICD-10	Research Question	Interventions	References	Study Design	Page No.
E66	To evaluate the effect of auricular acupuncture on energy and hormone metabolism	Acupuncture ear acupuncture	You WK, Lee MJ, Oh JG. The effects of auricular acupuncture for obesity on the change of hormone and energy metabolism during weight control of veteran taekwondo players. <i>Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)</i> 2000; 10(1): 133–45 (in Korean with English abstract).	RCT	30
E66	To examine the therapeutic effect of Sobi-eum (Xiaofei-yin [消肥飲]) mesotherapy on abdominal obesity.	Sobi-eum (Xiaofei-yin [消肥飲])	Lee AR, Cho YJ, Jung WS, et al., The effects of Sobi-eum (Xiaofei-yin) mesotherapy on abdominal fat distribution, <i>Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)</i> 2009; 19(2): 261–73 (in Korean with English abstract).	Double blind RCT	31
E66	To evaluate the effectiveness of Sa-am acupuncture (舍岩鍼) treatment in women with simple obesity.	Sa-am acupuncture (舍岩鍼)	Kim SC, Jang EH, Na WM, et al. A pilot study of Sa-am acupuncture treatment used by sham acupuncture for the simple obesity. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2007; 24(5): 67–88 (in Korean with English abstract).	Double blind RCT	32
E66	To evaluate the therapeutic effect of Ephedra Sinica (麻黃) and Evodia Rutaecarpa (吳茱萸) on obesity in women.	Ephedra Sinica (麻黃) and Evodia Rutaecarpa (吳茱萸)	Kim SJ, Kim HJ, Ko BP, et al. Effect of Ephedra Sinica and Evodia Rutaecarpa on resting metabolic rate in obese premenopausal women during low-calorie diet: A randomized controlled clinical trial. <i>Hanbang-Biman-Hakhoeji (Journal of Korean Oriental Association for Study of Obesity)</i> 2004; 4(1): 45–54 (in Korean with English abstract).	Double blind RCT	33

ICD-10	Research Question	Interventions	References	Study Design	Page No.
E78	To compare the efficacy of Chunghyul-dan (清血丹) with that of atorvastatin (Lipitor®) in lowering lipid levels.	Chunghyul-dan (清血丹)	Kim TK, Jung WS, Park SU, et al. Comparison of efficacy and safety between Chunghyul-dan (HH-333) and Atorvastatin (Lipitor®). <i>Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)</i> 2003; 24(4): 837–45 (in Korean with English abstract).	RCT	34
E78	To examine the effects of Yak-Sun tea (藥膳茶: Koekac, Sansa, Heshouwu, Wulong) on blood lipid levels and oxidative stress in hyperlipidemic women.	Yak-Sun tea (藥膳茶: Koekac, Sansa, Heshouwu, Wulong)	Park SH. Effects of Yak-Sun tea prescription from Oriental medicinal herbs for serum lipid levels and oxidative stress in hyperlipidemic women. <i>Dongui-Saengli-Byeongli-Hakhoeji (Korean Journal of Oriental Physiology &amp; Pathology)</i> 2006; 20(5): 1180–6 (in Korean with English abstract).	RCT	35

### 5. Psychiatric/Behavioral Disorders (6 abstracts, 6 references)

ICD-10	Research Question	Interventions	Reference	Study Design	Page No.
F41	To evaluate the effect of acupuncture stimulation on the skin conductance response of patients with anxiety and normal subjects.	acupuncture	Jeong MS, Choi WJ, Lee KW, et al. The effects of acupuncture stimulation on skin conductance response of anxiety patients and normal subjects. <i>Dongui-Singyeongjeongsingwa-Hakhoeji (Journal of Oriental Neuropsychiatry)</i> 2009; 20(2): 101–10 (in Korean with English abstract).	RCT	36

### 6. Nervous System Diseases (including Alzheimer's Disease) (12 abstracts, 12 references)

ICD-10	Research Question	Interventions	References	Study Design	Page No.
G20	To evaluate the effect of acupuncture stimulation of the Taichong (LR3 太冲) and Yanglingquan (GB34, 陽陵泉) acupuncture points on UPDRS and HRV parameters in patients with idiopathic Parkinson's disease.	acupuncture	Jung JC, Kim KH, Park YC, et al. The Study on the effect of acupuncture on UPDRS and heart rate variability in the patients with idiopathic Parkinson's disease. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2006;23(3)143–153 (in Korean with English abstract).	RCT	37
G20	To evaluate the effect of constitution-dependent acupuncture on heart rate variability (HRV) of patients with idiopathic Parkinson's disease.	acupuncture	Kim HB, Lee MH, Lee SY, et al. The comparative study on the effect of constitution-dependent acupuncture treatment for idiopathic Parkinson's disease on heart rate variability. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2007; 24(3): 163–74 (in Korean with English abstract).	RCT	38
G20	To evaluate the therapeutic effect of acupuncture point acupuncture treatment in patients with idiopathic Parkinson's disease	acupuncture	Park YC, Jang DI, Lee YH, et al. A study on the effect of acupuncture treatment in patients with idiopathic Parkinson's disease. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2007; 24(4): 43–54 (in Korean with English abstract).	RCT	39
G43, G44.2	To compare the effect of clinical Oriental medical treatment and East-West combined medical treatment on chronic headache.	clinical Oriental medical treatment and East-West combined medical treatment	Jung IT, Lee SH, Kim SY, et al. A clinical study of East-West pain treatment on chronic headache patients. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2005; 22(3): 93–104 (in Korean with English abstract).	RCT	40
G44.2	To examine the effects of Sa-am acupuncture (舍岩鍼) on chronic tension-type headache.	Sa-am acupuncture	Hong KE, Park YC, Cho JH et al. Effect of Sa-am acupuncture method for chronic tension-type headache: A randomized controlled trial. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2007; 24(1): 13–28 (in Korean with English abstract).	RCT	41
G44.2	To determine the persistent effects of acupuncture treatment on chronic tension-type headache.	acupuncture	Kwak BM, Kim MJ, Kim YM, et al. Persistent effects of acupuncture on chronic tension-type headache: A randomized controlled trial. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2008; 25(2): 165–77 (in Korean with English abstract).	RCT	42
G44.8	To evaluate the effectiveness of pulsed electromagnetic therapy for cervicogenic headaches.	pulsed electromagnetic therapy	Heo KH, Hwang HJ, Park YH, et al. Effects of pulsed electromagnetic therapy for cervicogenic headaches: Randomised clinical trial. <i>Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)</i> 2007; 17(3): 147–59 (in Korean with English abstract).	RCT	43

ICD-10	Research Question	Interventions	References	Study Design	Page No.
G51.0	To compare the efficacy of acupuncture with that of Dong's acupuncture as treatment for Bell's palsy.	Dong's acupuncture	Lee CU, Park IB, Kim SU, et al. The effect of acupuncture and Dong's acupuncture about Bell's palsy. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2004; 21(2): 287–300 (in Korean with English abstract).	RCT	44
G51.0	To evaluate the efficacy of Hominis placenta herbal acupuncture in the treatment of Bell's palsy.	Hominis placenta herbal acupuncture	Lee CW, Kim HG, Heo SW, et al. The clinical study about Hominis placenta herbal acupuncture on Bell's palsy. <i>Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)</i> 2005; 8(3): 87–97 (in Korean with English abstract).	RCT	45
G51.0	To determine the clinical efficacy of bee venom aqua-acupuncture for the treatment of peripheral facial paralysis.	bee venom aqua-acupuncture	Kim MS, Kim HJ, Park YJ, et al. The clinical research of the efficacy of bee venom aqua-acupuncture on peripheral facial paralysis. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2004; 21(4): 251–62 (in Korean with English abstract).	RCT	46
G51.0	To compare the effectiveness of Bell's palsy treatment with Oriental medicines only to that of combined treatment with Oriental and Western medicines.	Oriental medicines treatment combined treatment with Oriental and Western medicines	Kwon NH, Shin YJ, Kim CY, et al. Comparative clinical study between Oriental medical and Oriental-Western medical treatment on Bell's palsy. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2008; 25(3): 19–28 (in Korean with English abstract).	RCT	47
G56.0	To evaluate the efficacy of Scolopendrid herbal acupuncture in the treatment of carpal tunnel syndrome.	Scolopendrid herbal acupuncture	Lim JA, Kim SC, Kim SN, et al. Treatment of carpal tunnel syndrome using Scolopendrid herbal acupuncture. <i>Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)</i> 2005; 8(1): 13–20 (in Korean with English abstract).	RCT	48

### 7. Eye Diseases (1 abstract, 1 reference)

ICD-10	Research Question	Interventions	Reference	Study Design	Page No.
H52.1	To compare the efficacy of the eye acupuncture point massage with that of acupuncture in the treatment of myopic eyes.	eye acupuncture point massage	Kim MB, Kim KK, Hong SH, et al. The clinical tests for treatment improvement comparison in Myopia between eye acupuncture massage machine (NURIEYE-1) and acupuncture. <i>Daehan-Hanbang-AnIbiinhupibugwa-Hakhoeji (Journal of Korean Oriental Medical Ophthalmology Otolaryngology Dermatology)</i> 2009; 22(3): 80–94 (in Korean with English abstract).	RCT	49

### 9. Cardiovascular Diseases (27 abstracts, 27 references)

ICD-10	Research Question	Interventions	References	Study Design	Page No.
I10	To assess the efficacy of acupuncture as an adjunctive treatment for hypertension.	acupuncture	Yin CS, Seo BK, Park HJ, et al. Acupuncture, a promising adjunctive therapy for essential hypertension: a double-blind, randomized, controlled trial. <i>Neurological Research</i> 2007; 29(suppl 1): s98–103.	RCT	50
I10	To assess the effects of acupuncture at the Zusanli (ST 36, 足三里) acupuncture point on blood pressure and endothelial dependent vasodilation.	acupuncture	Bae HS, Shin AS, Park SU, et al. Effects of acupuncture at ST36 on blood pressure and endothelial dependent vasodilation in hypertensive patients. <i>Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)</i> 2008; 29(3): 657–65 (in Korean with English abstract).	RCT	51
I10	To evaluate the effect of Zusanli (ST 36, 足三里) moxibustion on blood pressure elevation in hypertensive patients.	moxibustion	Kim BS, Jang IS, Yeo JJ, et al. Effect of Choksamni (足三里, ST36) moxibustion on blood pressure elevation in hypertensive patients: A randomized controlled trial. <i>Daehan-Hanui-Hakhoeji (Journal of Korean Oriental Medical Society)</i> 2005; 26(3): 66–73 (in Korean with English abstract).	RCT	52
I10	To evaluate the effect of ginseng on the blood pressure in hypertensive patients.	Ginseng(韓國蔘, 中國蔘, 西洋蔘)	Lee CR, Lee SH, Rhee JW, et al. The effect of Korean, Chinese and American ginseng on blood pressure of hypertensive patients. <i>Daehan-Hanui-Hakhoeji (Journal of Korean Oriental Medical Society)</i> 2005; 26(3): 228–38 (in Korean with English abstract).	Double blind RCT	53
I10,I61,I63	To evaluate the effect of Sam-Hwang-Sa-Sim-Tang (三黃瀉心湯) on mild hypertension.	Sam-Hwang-Sa-Sim-Tang (三黃瀉心湯)	Chung KH, Roh JH, Kim LD, et al. The effects of Samhwangsasim-tang extracts on ambulatory blood pressure in mild hypertensive patients with stroke. <i>Daehan-Hanbang-Seonginbyeong-Hakhoeji (Journal of Korean Oriental Chronic Disease)</i> 2002; 8(1): 41–52 (in Korean with English abstract).	RCT	54

ICD-10	Research Question	Interventions	References	Study Design	Page No.
I10,I61,I63	To evaluate the anti-hypertensive effect of Chunghyul-dan (Qingxue-dan, 清血丹) on stroke patients with essential hypertension.	Chunghyul-dan (Qingxue-dan, 清血丹)	Yun SP, Jung WS, Park SU, et al. Anti-hypertensive effect of Chunghyul-dan (Qingxue-dan) on stroke patients with essential hypertension. <i>American Journal of Chinese Medicine</i> 2005; 33(3): 357–64.	Double blind RCT	55
I61,I63	To evaluate the efficacy of intradermal acupuncture for insomnia after stroke.	intradermal acupuncture	Lee SH, Kim EJ, Kim LD, et al. The effect of intradermal acupuncture on the patients with the insomnia after stroke. <i>Daehan-Hanbang-Naegwa-Hakhojei (Korean Journal of Oriental Internal Medicine)</i> 2004; 25(1): 136–46 (in Korean with English abstract).	RCT	56
I61,I63	To evaluate the effectiveness of the intradermal acupuncture at the Shenmen (HT7, 神門) and Neiguan (PC6, 內關) acupuncture points for insomnia.	intradermal acupuncture	Lee SY, Baek YH, Park SU, et al. Intradermal acupuncture on Shen-Men and Nei-Kuan acupoints improves insomnia in stroke patients by reducing the sympathetic nervous activity: a randomized clinical trial. <i>American Journal of Chinese Medicine</i> 2009; 37(6): 1013–21.	RCT	57
I61,I63	To evaluate the effectiveness of acupuncture at the Palsa (EX-UE9, 八邪) acupuncture point for hand function recovery in hemiparetic patients after stroke.	acupuncture	Kim JY, Jung SM, Park CK, et al. The clinical effectiveness of acupuncture at Palsa (BaXie) for hand function in hemiparetic patients after stroke. <i>Daehan-Chimgu-Hakhojei (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2008; 25(2): 97–104 (in Korean with English abstract).	RCT	58
I61,I63	To evaluate the effectiveness of electroacupuncture for hand function recovery in hemiplegic patients after stroke.	electroacupuncture	Kim MB, Shin HD, Kim SS. The influence of electroacupuncture interosseous muscle for hand function in hemiplegic patients after stroke. <i>Hanbang-Jaehwal-Uihakgwa-Hakhojei (Journal of Oriental Rehabilitation Medicine)</i> 2005; 15(4): 17–28 (in Korean with English abstract).	RCT	59
I61,I63	To evaluate the effect of electroacupuncture on upper extremity function in hemiplegic patients after stroke.	electroacupuncture	Ryu HJ, Kim SS. Effect of electroacupuncture by different insertion method on upper limb function in post stroke patients with hemiplegia. <i>Hanbang-Jaehwal-Uihakgwa-Hakhojei (Journal of Oriental Rehabilitation Medicine)</i> 2006; 16(1): 49–61 (in Korean with English abstract).	RCT	60
I61,I63	To evaluate the effect of high and low frequency electroacupuncture on dyspraxia in hemiplegic patients after stroke.	electroacupuncture	Kim YS, Hong JW, Na BJ, et al. The effect of low vs. high frequency electrical acupuncture point stimulation on motor recovery after ischemic stroke by motor evoked potentials study. <i>American Journal of Chinese Medicine</i> 2008; 36(1): 45–54.	RCT	61
I61,I63	To evaluate the effectiveness of treatment with electroacupuncture on upper-extremity spasticity in stroke patients.	electroacupuncture	Lee SW, Yoon JM, Son JW, et al. The effect of electroacupuncture on upper-extremity spasticity of stroke patients. <i>Daehan-Hanbang-Naegwa-Hakhojei (Journal of Korean Oriental Internal Medicine)</i> 2007; 28(3): 492–501 (in Korean with English abstract).	RCT	62
I61,I63	To evaluate the effectiveness of bee venom acupuncture for shoulder pain in patients with hemiplegia after stroke.	bee venom acupuncture therapy	Ko CN, Min IK, Park SW, et al. Effectiveness of bee venom acupuncture on shoulder pain after stroke. <i>Daehan-Hanui-Hakhojei (Journal of Korean Oriental Medical Society)</i> 2007; 28(1): 11–24 (in Korean with English abstract).	RCT	63
I61,I63	To evaluate the effectiveness of bee venom acupuncture therapy for shoulder pain in patients with hemiplegia after stroke.	bee venom acupuncture therapy	Lee DY, Lee GM, Yeom SC, et al. A clinical study of bee venom acupuncture therapy on shoulder pain patients in stroke sequelae. <i>Daehan-Chimgu-Hakhojei (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2006; 23(4): 69–80 (in Korean with English abstract).	RCT	64
I61,I63	To evaluate the effect of ginger herbal acupuncture and bee venom acupuncture on hemiplegic shoulder pain after stroke.	ginger herbal acupuncture and bee venom acupuncture	Cho SW, Go KH, Nam JH, et al. The effectiveness of <i>Zingiberis Rhizoma</i> herbal acupuncture therapy and bee venom herbal acupuncture therapy on the poststroke hemiplegic shoulder pain. <i>Hanbang-Jaehwal-Uihakgwa-Hakhojei (Journal of Oriental Rehabilitation Medicine)</i> 2005; 15(4): 77–87 (in Korean with English abstract).	RCT	65
I61,I63	To evaluate the antispastic effect of the electroacupuncture and Moxibustion on stroke patients.	electroacupuncture and Moxibustion	Moon SK, Whang YK, Park SU, et al. Antispastic effect of electroacupuncture and moxibustion in stroke patients. <i>American Journal of Chinese Medicine</i> 2003; 31(3): 467–74.	RCT	66

ICD-10	Research Question	Interventions	References	Study Design	Page No.
I61,I63	To evaluate the effectiveness of the moxibustion in stroke patients with upper extremity hemiplegia.	moxibustion	Choi YS, Kim TK, Jung WS, et al. Effects of moxibustion on the hemiplegic upper extremity after stroke. <i>Daehan-Hanbang-Naegwa-Hakhojei (Korean Journal of Oriental Internal Medicine)</i> 2003; 24(2): 283–89 (in Korean with English abstract).	RCT	67
I61,I63	To evaluate the effectiveness of moxibustion stimulation for recovery of function in patients with hemiplegia after stroke.	moxibustion	Lee SH, Kim JK, Son YH, et al. A clinical study of moxibustion therapy's effect on functional recovery in hemiplegia on stroke. <i>Daehan-Hanbang-Naegwa-Hakhojei (Korean Journal of Oriental Internal Medicine)</i> 2008; 29(1): 278–84 (in Korean with English abstract).	RCT	68
I61,I63	To evaluate the effect of moxibustion on recovery from post-stroke urinary symptoms.	moxibustion	Yun SP, Jung WS, Park SU, et al. Effects of moxibustion on the recovery of post-stroke urinary symptoms. <i>American Journal of Chinese Medicine</i> 2007; 35(6): 947–54.	RCT	69
I61,I63	To evaluate the effectiveness of the Ban Ha Hu Bak-tang (Banxiahoupotang, 半夏厚朴湯) for post-stroke depression.	Ban Ha Hu Bak-tang (Banxiahoupotang, 半夏厚朴湯)	Na BJ, Jung JH, Choi CM, et al. Effects of Banhahubak-tang (Banxiahoupotang) on patients with poststroke depression. <i>Daehan-Hanbang-Naegwa-Hakhojei (Korean Journal of Oriental Internal Medicine)</i> 2005; 26(3): 563–74 (in Korean with English abstract).	RCT	70
I61,I63	To evaluate the effectiveness of Chuna (shoulder traction) therapy for shoulder pain in hemiplegic patients after stroke.	Chuna (shoulder traction) therapy	Kim MB, Chung SK, Kim SS. The influences of Chuna (shoulder traction) therapy for shoulder pain and range of movement in hemiplegic patients after stroke. <i>Hanbang-Jaehwal-Uihakgwa-Hakhojei (Journal of Oriental Rehabilitation Medicine)</i> 2007; 17(2): 185–98 (in Korean with English abstract).	RCT	71
I61,I63	To evaluate the effectiveness of the Chuna manual treatment for hemiplegia after stroke.	Chuna manual treatment	Kwon OG, Jang WS, Woo CH, et al. The efficacy of adjusting leg length inequality by Chuna manual treatment for post stroke hemiplegia. <i>Hanbang-Jaehwal-Uihakgwa-Hakhojei (Journal of Oriental Rehabilitation Medicine)</i> 2009; 19(2): 187–202 (in Korean with English abstract).	RCT	72
I63	To evaluate the effectiveness of electroacupuncture for upper extremity hemiplegia after stroke.	electroacupuncture	Ryu SH, Lee KS, Kim TK, et al. Effects of electroacupuncture on the hemiplegic upper extremity after stroke. <i>Daehan-Hanui-Hakhojei (Journal of Korean Oriental Medical Society)</i> 2002; 23(2): 180–9 (in Korean with English abstract).	RCT	73
I63	To evaluate the effect of electroacupuncture at different frequencies on motor function recovery after stroke.	electroacupuncture	Hong JW, Choi CM, Park YM, et al. The effect of 2 Hz vs. 120 Hz frequency electrical acupuncture point stimulation on motor recovery after stroke by motor evoked potential study. <i>Daehan-Hanbang-Naegwa-Hakhojei (Korean Journal of Oriental Internal Medicine)</i> 2006; 27(1): 265–75 (in Korean with English abstract).	RCT	74
I63	To evaluate the effect of Whangryunheadoc-tang Gami-bang (Huanglianjiedu-Tan JiaWei-Fang, 黃連解毒湯加味方) on acute stage stroke.	Whangryunheadoc-tang Gami-bang (Huanglianjiedu-Tan JiaWei-Fang, 黃連解毒湯加味方)	Chung WS, Kim SS. Effects of Whangryunheadoc-tang Gami-bang (Huanglianjiedu-Tan JiaWei-Fang) on acute stage stroke patients. <i>Hanbang-Jaehwal-Uihakgwa-Hakhojei (Journal of Oriental Rehabilitation Medicine)</i> 2004; 14(1): 107–18 (in Korean with English abstract).	RCT	75
I70	To evaluate the effect of Chunghyul-dan (清血丹, Qingxie-dan) on arterial stiffness.	Chunghyul-dan (清血丹, Qingxie-dan)	Park SU, Jung WS, Moon SK, et al. Chunghyul-dan (Qingxie-dan) improves arterial stiffness in patients with increased baPWV. <i>American Journal of Chinese Medicine</i> 2006; 34(4): 553–63.	RCT	76

#### 10. Respiratory Diseases (including Rhinitis) (4 abstracts, 4 references)

ICD-10	Research Question	Interventions	References	Study Design	Page No.
J30	To evaluate the effect of acupuncture on nasal obstruction with acupuncture points specified in Donguibogam (東醫寶鑑, Treasured Mirror of Eastern Medicine).	acupuncture	Park YC, Jo JH, Hong KE, et al. Effect of acupuncture on nasal obstruction in patients with persistent allergic rhinitis: a randomized controlled trial. <i>Daehan-Chingwa-Hakhojei (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2005; 22(6): 229–39 (in Korean with English abstract).	RCT	77
J00	To evaluate the effect of Socheongryong-tang (小青龍湯) on the common cold.	Socheongryong-tang (小青龍湯)	Park YC. Effect of Socheongryong-tang on Punghan and Pungyeol type common cold: A double blind, placebo controlled study. <i>Dongui-Saengli-Byeongli-Hakhojei (Korean Journal of Oriental Physiology &amp; Pathology)</i> 2005; 19(2): 524–9 (in Korean with English abstract).	Double blind RCT	78

ICD-10	Research Question	Interventions	References	Study Design	Page No.
J00	To evaluate the effectiveness of a Yeonkyopaedok-san (連翹敗毒散) for the common cold.	Yeonkyopaedok-san (連翹敗毒散)	Bae HH, Kang WC, Park YC. Effectiveness of a Yeonkyopaedok-san extract in the treatment of the common cold: Results of a community-based, double blind, randomized placebo controlled trial. <i>Dongui-Saengli-Byeongli-Hakhoeji (Korean Journal of Oriental Physiology &amp; Pathology)</i> 2008; 22(1): 234-45 (in Korean with English abstract).	Double blind RCT	79
J30	To evaluate the efficacy of moxa-pellet treatment for allergic rhinitis.	moxa-pellet treatment	Kim JH, Ko JM, Lee SW, et al. Clinical study on the effect of moxa-pellet treatment in allergic rhinitis patients. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2007; 24(1): 175-85 (in Korean with English abstract).	RCT	80

### 11. Diseases of the Digestive Systems (7 abstracts, 7 references)

ICD-10	Research Question	Interventions	References	Study Design	Page No.
K07.6	To evaluate the effect of Chuna treatment on temporomandibular disorder in patients with idiopathic scoliosis.	acupuncture treatment and Chuna treatment	Song MS, Heo YK, Choi KW, et al. Clinical comparison study on 40 cases of temporomandibular disorder patients with idiopathic scoliosis treated by Chuna and general Oriental method. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2005; 22(5): 133-40 (in Korean with English abstract).	RCT	81
K07.6	To compare the effectiveness of Sa-am acupuncture treatment and Chuna treatment for temporomandibular disorder.	acupuncture treatment and Chuna treatment	Kim TS, Kim CY, Lee KH, et al. Comparative clinical study between the acupuncture treatment and the chuna treatment on temporomandibular disorder. <i>Cheokchu-Singyeong-Chuna-Ui-Hakhoeji (The Journal of Korea Chuna Manual Medicine for Spine and Nerves)</i> 2006; 1(1): 55-64 (in Korean with English abstract).	RCT	82
K30	To compare the effectiveness of acupuncture applied to classical acupuncture points with that applied to nondefined points for functional dyspepsia.	acupuncture	Park YC, Kang W, Choi SM, et al. Evaluation of manual acupuncture at classical and nondefined points for treatment of functional dyspepsia: a randomized-controlled trial. <i>Journal of Alternative and Complementary Medicine</i> 2009; 15(8): 879-84.	Single blind RCT	83
K30	To evaluate the effectiveness of herb medicine (DA-9701) for functional dyspepsia.	herb medicine (DA-9701)	Kim YM, Park YC, Jo JH, et al. Effect of herb medicine treatment for functional dyspepsia: a randomized placebo-controlled and compared standard treatment trial. <i>Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)</i> 2010; 31(1): 1-13 (in Korean with English abstract).	Single blind RCT	84
K59.0	To evaluate the effect of Carthami-Semen herbal acupuncture treatment for chronic constipation.	Carthami-Semen herbal acupuncture	Park JW, Yoon SW, Kim JS, et al. A clinical pilot study of Carthami-Semen herbal acupuncture treatment for chronic constipation. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2008; 25(5): 127-37 (in Korean with English abstract).	Single blind RCT	85
K59.0	To compare the effect of the Bo-Ryu enema (Bao-Liu enema) with that of general (conventional) enema in patients with acute stroke.	Bo-Ryu enema (Bao-Liu enema)	Son DH, Joh KH, Kim YS, The comparison study on the effect of bowel movement between Bo-Ryu Enema (保留灌腸, Bao-Liu Enema) and general enema in patients at the acute stage of cerebrovascular accident. <i>Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)</i> 2001; 22(3): 51-62 (in Korean with English abstract).	RCT	86
K70.1	To evaluate the effect of Injinoryung-san (茵陳五苓散) on alcoholic hepatitis.	Injinoryung-san (茵陳五苓散)	Hong SH, Kwon OS, Kim SH et al. Effects of Injinoryung-San on alcoholic hepatitis. <i>Dongui-Saengli-Byeongli-Hakhoeji (Korean Journal of Oriental Physiology &amp; Pathology)</i> 2008; 22(1): 204-8 (in Korean with English abstract).	Double blind RCT	87

### 12. Skin Diseases (4 abstracts, 4 references)

ICD-10	Research Question	Interventions	References	Study Design	Page No.
L20	To evaluate the efficacy of Seunggal-tang (升葛湯) powder extract for atopic dermatitis.	Seunggal-tang (升葛湯)	Shin SH, Kim JH, Kim MB, et al. A clinical research about the effects of Seunggal-tang on patients with atopic dermatitis. <i>Daehan-Hanbang-Anbiinhupibugwa-Hakhoeji (Journal of Korean Oriental Medical Ophthalmology Otolaryngology Dermatology)</i> 2007; 20(2): 199-212 (in Korean with English abstract).	RCT	88

ICD-10	Research Question	Interventions	References	Study Design	Page No.
L20	To evaluate the efficacy of cosmetics containing Yeongyuseungma-tang (連翹升麻湯) on atopic dermatitis patients.	cosmetics containing Yeongyuseungma-tang (連翹升麻湯)	Kim SH, Yun DC, Kim HT, et al. A clinical research of atopic dermatitis treated by Yeongyuseungmatang (連翹升麻湯) in cosmetics. <i>Daehan-Hanbang-Anlbiinhupibugwa-Hakhoeji (Journal of Korean Oriental Medical Ophthalmology Otolaryngology Dermatology)</i> 2008; 21(2): 126–41 (in Korean with English abstract).	Double blind RCT	89
L20	To evaluate the efficacy of cosmetics containing Hwangryeonhaedok-Tang (黃連解毒湯) for atopic dermatitis.	cosmetics containing Hwangryeonhaedok-Tang (黃連解毒湯)	Yun DC, Kim HT, Kim EH, et al. Clinical research of atopic dermatitis treated by Hwangryeonhaedok-Tang (黃連解毒湯) in cosmetics. <i>Dongui-Saengli-Byeongli-Hakhoeji (Korean Journal of Oriental Physiology &amp; Pathology)</i> 2008; 22(6): 1611–20 (in Korean with English abstract).	Double blind RCT	90
L21.0	To evaluate the effect of herbal shampoo and essence on dandruff.	herbal shampoo	Kim CH, Hwang DS, Kim JT, et al. A randomized, double-blind, placebo-controlled study to herbal shampoo and essence about dandruff. <i>Daehan-Hanbang-Anlbiinhupibugwa-Hakhoeji (Journal of Korean Oriental Medical Ophthalmology Otolaryngology Dermatology)</i> 2007; 20(3): 222–35 (in Korean with English abstract).	Double blind RCT	91

### 13. Diseases of the Musculo Skeletal System and Connective Tissue (35 abstracts, 35 references)

ICD-10	Research Question	Interventions	References	Study Design	Page No.
M06.9	To evaluate the effect of bee venom therapy on rheumatoid arthritis.	bee venom therapy	Lee SH, Hong SJ, Kim SY, et al. Randomized, controlled, double blind study of bee venom therapy on rheumatoid arthritis. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2003; 20(6): 80–8 (in Korean with English abstract).	Double blind RCT	92
M17	To evaluate the effect of personalized acupuncture (Sa-Am acupuncture [舍岩鍼]) on osteoarthritis of the knee.	Sa-am acupuncture	Byun H, Kim SW, Ahn JH, et al. Individualized acupuncture vs. standardized acupuncture in symptomatic treatment of osteoarthritis of the knee—a randomized controlled trial (IS Randomized, controlled trial N 40706107). <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2007; 24(4): 183–95 (in Korean with English abstract).	Single blind RCT	93
M17	To compare the effect of treatment at local acupuncture points and distal acupuncture points on knee degenerative osteoarthritis.	acupuncture	Park IS, Jung CY, Jang MK, et al. A randomized clinical trial of local acupuncture points compared with distal acupuncture points in degenerative osteoarthritis on knee. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2008; 25(2): 227–42 (in Korean with English abstract).	Single blind RCT	94
M17	To compare the effect of ‘intramuscular bee venom herbal acupuncture’ and ‘intracutaneous bee venom herbal acupuncture’ in knee osteoarthritis patients.	bee venom herbal acupuncture	Kim HB, Lee RM, Lee MH, et al. Comparative study of effects of ‘Intramuscular bee venom herbal acupuncture’ and ‘Intracutaneous bee venom herbal acupuncture’ in knee osteoarthritis patients. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2008; 25(2): 151–64 (in Korean with English abstract).	Single blind RCT	95
M17	To compare the effect of sweet bee venom (enzyme removed) pharmacopuncture with that of bee venom pharmacopuncture on knee osteoarthritis.	sweet bee venom pharmacopuncture and bee venom pharmacopuncture	Kim SC, Na WM, Lee SY, et al. A study on pain relief effects and allergic responses for the osteoarthritis of the knee joint between sweet bee venom and bee venom pharmacopuncture. <i>Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)</i> 2008; 11(1): 31–40 (in Korean with English abstract).	RCT	96
M17	To compare the effect of bee venom pharmacopuncture with that of warm needling on knee osteoarthritis.	bee venom pharmacopuncture and warm needling	Yang KR, Song HS. A comparative study of warm needling and bee venom pharmacopuncture on osteoarthritis of the knee—a randomized controlled trial. <i>Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)</i> 2008; 11 (2): 21–31 (in Korean with English abstract).	Single blind RCT	97
M17	To evaluate the effect of Jetongdan on Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) OA (an index of knee osteoarthritis severity).	Jetongdan (制痛丹)	Seo BK, Ryu SR, Kang JW, et al. Clinical study of the efficacy and safety of Jetongdan on patients with osteoarthritis of the knee. <i>Daehan-Hanui-Hakhoeji (Journal of Korean Oriental Medical Society)</i> 2005; 26(2): 231–40 (in Korean with English abstract).	Double blind RCT	98

ICD-10	Research Question	Interventions	References	Study Design	Page No.
M17	To evaluate the effect of Jetongdan on the quality of life in patients with knee osteoarthritis.	Jetongdan (制痛丹)	Seo BK, Ryu SR, Kang JW, et al. Effects of Jetongdan on the quality of life in patients with osteoarthritis of knee. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2005; 22(6): 219–28 (in Korean with English abstract).	RCT	99
M17	To evaluate the effect of Tai Chi Qigong on the quality of life of patients with knee osteoarthritis.	Tai Chi Qigong	Lee HJ, Park HJ, Chae YB, et al. Tai Chi Qigong for the quality of life of patients with knee osteoarthritis: a pilot, randomized, waiting list controlled trial. <i>Clinical Rehabilitation</i> 2009; 23(6): 504–11.	Single blind RCT	100
M51.1	To compare the efficacy of acupuncture, bee venom acupuncture, and bee venom pharmacopuncture as treatment for herniation of nucleus pulposus.	acupuncture, bee venom acupuncture, and bee venom pharmacopuncture	Yu SM, Lee JY, Kwon KR, et al. Comparative study of acupuncture, bee venom acupuncture, and bee venom pharmacopuncture on the treatment of herniation of nucleus pulposus. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2006; 23(5): 39–54 (in Korean with English abstract).	RCT	101
M51.1	To compare the efficacy of bee venom acupuncture and Ouhylul herbal acupuncture in patients with herniation of the nucleus pulposus.	bee venom acupuncture and Ouhylul (瘀血) herbal acupuncture	Lee SH, Kang MW, Lee H, et al. Effectiveness of bee-venom acupuncture and Ouhylul herbal acupuncture in herniation of nucleus pulposus—comparison with acupuncture therapy only. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2007; 24(5): 197–205 (in Korean with English abstract).	RCT	102
M54.2	To evaluate the effect of bee venom acupuncture therapy on C-spine sprain.	bee venom acupuncture	Kim KT, Song HS. A randomized controlled double blinding study of bee venom acupuncture therapy on sprain of C-spine. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2005; 22(4):189–95 (in Korean with English abstract).	Double blind RCT	103
M54.2	To compare the efficacy and safety of sweet-bee venom and bee venom acupuncture.	sweet-bee venom and bee venom acupuncture.	Lee KH, Youn HM, Ko WS, et al. Comparison of treatment effects and allergic responses to stiff neck between sweet bee venom and bee venom pharmacopuncture. <i>Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)</i> 2008; 11(4): 39–48 (in Korean with English abstract).	Double blind RCT	104
M54.2	To evaluate the effect of Chuna treatment on neck pain in patients with hypolordotic cervical spine.	Chuna treatment	Ryu HS, Jeon SH, Park DS, et al. Clinical study for Chuna treatment on neck pain patient with hypolordotic cervical spine. <i>Cheokchu-Singyeong-Chuna-Ui-Hakhoeji (The Journal of Korea Chuna Manual Medicine for Spine and Nerves)</i> 2006; 1(2): 11–20 (in Korean with English abstract).	RCT	105
M54.2	To evaluate the effect of Gigong therapy (氣功外氣療法) on neck stiffness measured by ABR-2000.	Gigong therapy (氣功外氣療法)	Jung EY, Na SS, Lee KN. Clinical effect of Gigong therapy by measuring ABR-2000 on neck stiffness patients. <i>Daehan-Uilyo-Gigong-Hakhoeji (Journal of Korean Academy of Medical Gigong)</i> 2003; 7(1): 61–76 (in Korean with English abstract).	RCT	106
M54.4	To compare the effect of sweet bee venom acupuncture and bee venom acupuncture on low back pain with radiating pain.	sweet bee venom acupuncture and bee venom acupuncture	Lee TH, Hwang HS, Chang SY, et al. The comparison of effectiveness between bee venom and sweet bee venom therapy on low back pain with radiating pain. <i>Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)</i> 2007; 10(3): 85–9 (in Korean with English abstract).	Double blind RCT	107
M54.5	To evaluate the effect of Dong-Si (董氏) acupuncture pointstimulation on meridian muscle tension.	Dong-Si (董氏) acupuncture	Cho JH, Chung SH, Kim SS. The effect of Dong-Si acupuncture point on the meridian muscle tension of the governor vessel and bladder meridian. <i>Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)</i> 2006; 16(3): 83–92 (in Korean with English abstract).	RCT	108
M54.5	To evaluate the efficacy of acupuncture for chronic low back pain.	acupuncture	Kwon YD, Lee SG, Lee CW, et al. The short-term efficacy of acupuncture for chronic low back pain: Randomized sham controlled trial. <i>Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)</i> 2007; 17(2): 123–32 (in Korean with English abstract).	Single blind RCT	109
M54.5	To evaluate the safety and efficacy of Dong-gi (動氣) acupuncture (DGA) for lumbago due to blood stasis and sprain.	acupuncture	Kim KH, Lim HH, Hwang HS, et al. The study of effect and safety related to Dong-gi acupuncture (DGA) and complex therapy on lumbago due to blood stasis and sprain. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2002; 19(3): 107–14 (in Korean with English abstract).	RCT	110



ICD-10	Research Question	Interventions	References	Study Design	Page No.
M54.5	To compare the effectiveness of Carthami semen (紅花, Honghwa) herbal acupuncture with that of Carthami semen herbal acupuncture + spiral taping for acute low back pain.	Carthami semen (紅花, Honghwa) herbal acupuncture and spiral taping	Jung MS. Effectiveness of herbal acupuncture of Carthami semen (Honghwa) vs. its cotreatment with spiral taping for the treatment of acute low back pain: A randomized controlled trial. <i>Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)</i> 2002; 5(2): 25–38 (in Korean with English abstract).	RCT	111
M54.5	To evaluate the effectiveness of bee venom acupuncture therapy for pain due to sprain of the L-spine.	bee venom acupuncture	Kim KT, Song HS. The effectiveness of bee venom acupuncture therapy on the treatment of sprain of L-spine (a randomized controlled trial; double blinding). <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2005; 22(4): 113–20 (in Korean with English abstract).	Double blind RCT	112
M54.5	To compare the efficacies of sweet bee venom acupuncture and bee venom acupuncture for chronic lower back pain.	sweet bee venom acupuncture and bee venom acupuncture	Kim JH, Jang SH, Yoon HM, et al. The comparison of effectiveness between bee venom and sweet bee venom therapy on chronic lower back pain. <i>Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)</i> 2008; 11(4): 15–24 (in Korean with English abstract).	Double blind RCT	113
M54.5	To evaluate the effect of concurrent treatment with Sacro Occipital technique (SOT) and conventional acupuncture on lower back pain and physical functioning.	Sacro Occipital technique (SOT) and conventional acupuncture	Song SC, Jung DU, Yeo KC, et al. A study on the effectiveness and relation of the Sacro Occipital technique blocking with acupuncture treatment. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2008; 25(2): 27–40 (in Korean with English abstract).	RCT	114
M54.5	To evaluate the nephrotoxicity of Kami Woosul-tang (加味牛膝湯) and its efficacy for low back pain.	Kami Woosul-tang (加味牛膝湯)	Yang JH, Han SC, Oh RS, et al. A clinical study of the effects of KamiWoosul-tang on low back pain and kidney function. <i>Daehan-Hanui-Hakhoeji (Journal of Korean Oriental Medical Society)</i> 2000; 21(4): 216–26 (in Korean with English abstract).	RCT	115
M54.5	To evaluate the efficacy of moxa-pellet therapy for chronic lower back pain.	moxa-pellet therapy	Ko YJ, Lee RM, Kim JG, et al. The clinical study on effects of Moxa-pellet therapy in chronic low back pain patients. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2007; 24(3): 187–96 (in Korean with English abstract).	Single blind RCT	116
M54.5	To evaluate the therapeutic effect of Weizhong (BL40, 委中) venepuncture on low back pain.	venepuncture	Lee SH, Cheong BS, Yun HS, et al. Therapeutic effect of Weizhong (BL40) venepuncture on low back pain. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2002; 19(1): 65–75 (in Korean with English abstract).	Single blind RCT	117
M54.5	To evaluate the effect of spiral taping therapy on low back pain or neck pain.	spiral taping	Choi SH, Ko KM, Kim KW, et al. The effects of spiral taping therapy—a randomisation controlled trial. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2006; 23(2): 165–72 (in Korean with English abstract).	RCT	118
M54.5	To evaluate the effect of spiral taping in the low back pain patients.	spiral taping	Lee JW, Kim CH, Moon SH, et al. Effectiveness of spiral taping in the low back pain patients. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2006; 23(5): 1–10 (in Korean with English abstract).	RCT	119
M75	To evaluate the effect of Dong’s acupuncture on chronic shoulder pain.	acupuncture	Kim CY, Kwon NH, Shin YJ, et al. Randomized controlled trial: Effect of master Dong’s acupuncture in chronic shoulder pain patients. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2007; 24(6): 89–96 (in Korean with English abstract).	RCT	120
M75	To evaluate the effectiveness of combinations of Eastern-Western medical treatments for chronic shoulder pain.	acupuncture	Nam DW, Choi YS, Kim HB, et al. Randomized controlled trial of East-West collaborative medical treatment on female chronic shoulder pain patients. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2007; 24(6): 113–22 (in Korean with English abstract).	RCT	121
M75	To assess the difference in subjective sensation between patients treated with real acupuncture and patients treated with sham acupuncture in a pilot study preceding clinical trials of acupuncture treatment of shoulder pain.	acupuncture	Lee SY, Lim JA, Na WM, et al. The study of the Kim sham acupuncture for single blind about the acupuncture points used for treatment of the shoulder pain. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2006; 23(6): 133–43 (in Korean with English abstract).	RCT	122

ICD-10	Research Question	Interventions	References	Study Design	Page No.
M75.0	To evaluate the efficacy of combined Eastern-Western medical treatments for frozen shoulder (凍結肩).	acupuncture	Nam DW, Kim HB, Yang DH, et al. Comparison research of clinical effect of Eastern and Western medical treatment on frozen shoulder patients. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2006; 23(5): 105–13 (in Korean with English abstract).	RCT	123
M75.0	To compare the efficacy of Eastern medical treatment with that of Western medical treatment for frozen shoulder.	Acupuncture	Nam DW, Jung IT, Kim JH, et al. Clinical observation of Western medical treatment and acupuncture treatment on frozen shoulder patients. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2006; 23(5): 177–85 (in Korean with English abstract).	RCT	124
M75.0	To compare the effectiveness of acupuncture and with that of nerve block treatment for adhesive capsulitis.	acupuncture	Nam DW, Lim S, Kim JI, et al. Clinical observation of acupuncture and nerve block treatment for adhesive capsulitis patients. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2007; 24(4): 143–55 (in Korean with English abstract).	RCT	125
M81	To evaluate the effect of Ultraviolet-B (UV-B) on the prevention and course of osteoporosis.	Ultraviolet-B (UV-B)	Hwang DS, Kim YS, Lee KS. Effects of Ultraviolet-B(UV-B) radiation on Calcium, Vitamin D3 and Cholesterol level in postmenopausal women. <i>Daehan-Hanbang-Bulngwa-Hakhoeji (Journal of Oriental Obstetrics and Gynecology)</i> 2004; 17(4): 166–73 (in Korean with English abstract).	RCT	126

#### 14. Genitourinary Tract Disorders(including Climacteric Disorders) (10 abstracts, 10 references)

ICD-10	Research Question	Interventions	References	Study Design	Page No.
N41.1	To evaluate the efficacy of electroacupuncture for chronic pelvic pain.	Electroacupuncture	Lee SH, Lee BC. Electroacupuncture relieves pain in men with chronic prostatitis/chronic pelvic pain syndrome: Three-arm randomized trial. <i>Urology</i> 2009; 73: 1036–41.	Single blind RCT	127
N41.1	To evaluate the efficacy of Bosingunyang-tang (補腎健陽湯) for pain due to chronic non-bacterial prostatitis.	Bosingunyang-tang (補腎健陽湯)	Song MK, Kang JS, Kang CH, et al. The clinical effect of Bosingunyang-tang on chronic non-bacterial prostatitis/chronic pelvic pain syndrome: randomized double-blind, placebo-controlled clinical trial. <i>Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)</i> 2008; 29(3): 800–9.	Double blind RCT	128
N91	To evaluate the effect of acupuncture treatment on primary dysmenorrhea.	Sa-am acupuncture	Youn HM, Kim CH, Park JH, et al. Effect of acupuncture treatment on the primary dysmenorrhea (A study of single blind, sham acupuncture, randomized, controlled clinical trial. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2008; 25(3): 139–54 (in Korean with English abstract).	Single blind RCT	129
N94.4	To evaluate the efficacy of aroma ceramic moxibustion for primary dysmenorrhea.	aroma ceramic moxibustion	Cho JH, Kim HS, Choi DY, et al. A clinical study on the effect of aroma ceramic moxibustion for primary dysmenorrhea. <i>Daehan-Hanbang-Bulngwa-Hakhoeji (Journal of Oriental Obstetrics and Gynecology)</i> 2009; 22(1): 172–81 (in Korean with English abstract).	Double blind RCT	130
N94.4	To evaluate the efficacy of Chiljehyangbuhwan (七製香附丸) on primary dysmenorrhea.	Chiljehyangbuhwan (七製香附丸)	Jang JB, Yoon YJ, Park JH, et al. Therapeutic effects of chiljehyangbuhwan on primary dysmenorrhea: A randomized, double blind, placebo-controlled study. <i>Complementary Therapies in Medicine</i> 2009; 17: 123–30.	Double blind RCT	131
N94.4	To compare Gyejibongnyeong-hwan with Gyejibongnyeong-hwan plus acupuncture therapy for primary dysmenorrhea.	Gyejibongnyeong-hwan and acupuncture	Cho JH. A pilot study of the difference between Gyejibongnyeong-hwan and Gyejibongnyeong-hwan combined acupuncture therapy on the primary dysmenorrhea. <i>Daehan-Hanbang-Bulngwa-Hakhoeji (Journal of Oriental Obstetrics and Gynecology)</i> 2007; 20(1): 161–68 (in Korean with English abstract).	RCT	132
N95.1	To evaluate the effect of acupuncture on hot flashes and climacteric symptoms.	acupuncture	Kim KH, Kang KW, Kim DI, et al. Effects of acupuncture on hot flashes in perimenopausal and postmenopausal women—a multicenter randomized clinical trial. <i>The Journal of the North American Menopause Society</i> 2010; 11(2): 269–80.	Open trial RCT	133

ICD-10	Research Question	Interventions	References	Study Design	Page No.
N95.1	To evaluate the effect of moxibustion on hot flashes of menopausal women.	moxibustion	Park JE, Lee MS, Jung SY, et al. Moxibustion for treating menopausal hot flashes: A randomized clinical trial. <i>Menopause</i> 2009; 16(4): 660–65.	Single blind RCT	134
N95.1	To evaluate the effect of red ginseng for hot flushes in postmenopausal women.	red ginseng	Kim HS, Yoon YJ, Lee JM, et al. A clinical study on the effect of red ginseng for postmenopausal hot flushes. <i>Daehan-Hanbang-Bulngwa-Hakhoeji (Journal of Oriental Obstetrics and Gynecology)</i> 2009; 22(2): 132–39 (in Korean with English abstract).	Double blind RCT	135
N95.1	To evaluate the effect of Daejo-hwan (大造丸, DJH) on climacteric syndrome, not only on common symptoms such as hot flashes, anxiety, and palpitation, but also on urogenital tract disturbances like vaginal dryness, which leads to sexual problems.	Daejo-hwan (大造丸, DJH)	Kim SM, Shin SM, Kim EI, et al. A clinical study on the effect of Daejo-hwan (DJH) on climacteric syndrome. <i>Daehan-Hanbang-Bulngwa-Hakhoeji (Journal of Oriental Obstetrics and Gynecology)</i> 2006; 19(4): 225–44 (in Korean with English abstract).	Open trial RCT	136

### 15. Ante/Post-partum Diseases (1 abstracts, 1 reference)

ICD-10	Research Question	Interventions	References	Study Design	Page No.
O90.9	To evaluate the effect of Mokhyangsaenghwa-tang (木香生化湯) on postpartum recovery and lactation.	Mokhyangsaenghwa-tang (木香生化湯)	Hwang DS, Park MW, Chun HN, et al. Effects of Mokhyangsaenghwa-tang beverage on postpartum recovery and lactation. <i>Daehan-Hanbang-Bulngwa-Hakhoeji (Journal of Oriental Obstetrics and Gynecology)</i> 2006; 19(4): 216–24 (in Korean with English abstract).	RCT	137

### 18. Symptoms and Signs (12 abstracts, 12 references)

ICD-10	Research Question	Interventions	References	Study Design	Page No.
R07	To evaluate the effect of Cardiotonic Pills® (心適丸) on chest pain and discomfort.	Cardiotonic Pills® (心適丸)	Jang IS, Ko CN, Lee I, et al. Effect of Cardiotonic Pills® (心適丸) on chest pain and discomfort: A multi-center double-blind randomized controlled trial. <i>Daehan-Hanui-Hakhoeji (Journal of Korean Oriental Medicine)</i> 2005; 26(2): 95–104 (in Korean with English abstract).	Double blind RCT	138
R11	To evaluate acupuncture at the Neiguan (PC6, 內關) acupoint for preventing opioid-induced nausea and vomiting.	acupuncture	Lee SK, Lee SW, Choi DH. Effect of acupuncture on P6 for preventing opioid-induced nausea and vomiting. <i>Dongui-Saengli-Byeongli-Hakhoeji (Korean Journal of Oriental Physiology &amp; Pathology)</i> 2007; 21(6): 1637–40 (in Korean with English abstract).	RCT	139
R11	To evaluate the effect of auricular acupuncture on postoperative vomiting.	auricular acupuncture	Kim Y, Kim CW, Kim KS. Clinical observations on postoperative vomiting treated by auricular acupuncture <i>American Journal of Chinese Medicine</i> 2003; 31(3): 475–80.	RCT	140
R45.7	To evaluate the effect of microcurrent electrical neuromuscular stimulation (MENS) on emotional shock and stress condition.	microcurrent electrical neuromuscular stimulation (MENS)	Kim SU, Lee JS, Kim SS, et al. The effect of microcurrent electrical neuromuscular stimulation on stress-related hormones. <i>Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)</i> 2003; 13(4): 1–18 (in Korean with English abstract).	RCT	141
R50.9	To evaluate the effect of venesection at the Sybsun-point (十宣穴) on fever.	venesection at the Sybsun-point (十宣穴)	Kim JJ, Kim EJ, Lee SH, et al. Antipyretic effect of blood-letting at the Sybsun-points on fever comparing with aspirin injection. <i>Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)</i> 2003; 24(3): 675–80 (in Korean with English abstract).	RCT	142
R51	To evaluate the effect of non-medicinal treatment on pain behavior in chronic headache patients.	acupuncture	Choi DY, Lim SB, Cha NH, et al. Effects on pain behavior in non-medicinal treatment applied to chronic headache patients. <i>Gyeonglak-Gyeonghyeol-Hakhoeji (The Korean Journal of Meridian &amp; Acupoint)</i> 2005; 22(1): 55–66 (in Korean with English abstract).	RCT	143
R51	To evaluate the efficacy of Hwangryunhaedoktang (黃連解毒湯) herbal-acupuncture therapy for functional headache.	Hwangryunhaedoktang (黃連解毒湯) herbal-acupuncture therapy	Kim HK, Youn HM, Ahn CB. Clinical studies on Hwangryunhaedoktang herbal-acupuncture therapy on functional headache. <i>Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)</i> 2006; 9(3): 131–38 (in Korean with English abstract).	Single blind RCT	144

ICD-10	Research Question	Interventions	References	Study Design	Page No.
R51	To compare the effectiveness of general and aroma acupuncture as treatment for chronic headache.	aroma acupuncture	Jung IT, Kim SY, Kim KS, et al. A clinical study of aroma acupuncture on chronic headache patients. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2004; 21(5): 123–36 (in Korean with English abstract).	RCT	145
R53	To evaluate the effect of Sa-am acupuncture treatment for patients with fatigue.	SA-am acupuncture	Kim SH, Park HJ, Park HA, et al. The clinical study on the effect of SAAM acupuncture treatment for patients with fatigue. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2007; 23(6): 149–57 (in Korean with English abstract).	Single blind RCT	146
R53	To evaluate the effect of Myelophil on patients with chronic fatigue.	Myelophil	Cho JH, Cho CK, Shin JW, Son JY, Kang W, Son CG. Myelophil, an extract mix of astragali radix and salviae radix, ameliorates chronic fatigue: A randomized, double-blind, controlled pilot study. <i>Complementary Therapies in Medicine</i> 2009; 17(3): 141–46.	Double blind RCT	147
R53	To evaluate the effect of treatment with magnetic field on fatigue-related physiological changes.	magnetic field therapy	Chun SY, Lee ES. The effects of the magnetic therapy treated on acupuncture point for recovery from fatigue with before and after exercise. <i>Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)</i> 1998; 8(1): 158–70 (in Korean with English abstract).	RCT	148
R53	To evaluate the effect of magnetic field therapy on recovery from muscle fatigue.	magnetic field therapy	Kim HK, Lee ES. The effect of magnetic field stimulation of ear acupoints on physical vitality before and after exercise. <i>Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)</i> 1998; 8(1): 187–202 (in Korean).	Double blind RCT	149

## 20. Injury, Poisoning and Certain Other Consequences of External Causes (9 abstracts, 9 references)

ICD-10	Research Question	Interventions	References	Study Design	Page No.
S13S33S49	To compare the effect of Oriental medicine therapy with that of Oriental-Western combination therapy on recovery from injury due to traffic accidents.	Oriental medicine therapy and Oriental-Western combination therapy	Lee KH, Kim JE, Youn HM, et al. Comparison of the treatment effect between Oriental medicine therapy and Oriental and Western medicine combination therapy on traffic accident patients. <i>Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)</i> 2007; 10(3): 91–9 (in Korean with English abstract).	RCT	150
S13.4	To evaluate the effectiveness of spiral taping for motor disturbance of the neck induced by cervical sprain.	spiral taping	Kwon KR. Effects of spiral taping in motor disturbance of the neck induced by cervical sprain—randomized clinical controlled trials. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2006; 23(2): 159–64 (in Korean with English abstract).	RCT	151
S13.4	To evaluate the effect of Kinesio taping® on traffic accident patients with nuchal pain.	Kinesio taping	Kim HS, Kim MK, Hwang JP, et al. The clinical studies for Kinesio taping on patients with nuchal pain caused by traffic accidents. <i>Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)</i> 2008; 18(3): 67–80 (in Korean with English abstract).	RCT	152
S13.4	To evaluate the effectiveness of muscle energy techniques for nuchal pain caused by injuries from traffic accident trauma.	muscle energy techniques	Jeon TD, Lee HG, Hong SY, et al. The clinical studies for muscle energy techniques on patients with nuchal pain caused by traffic accidents. <i>Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)</i> 2009; 19(1): 125–34 (in Korean with English abstract).	RCT	153
S13.4	To evaluate the effect of the Alexander technique on patients with whiplash injuries.	Alexander technique	Ahn CK, Seo JW, Kim SJ. The effect of the 4 imageries of Alexander technique in traffic accident patients with whiplash injuries. <i>Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)</i> 2006; 16(4): 61–72 (in Korean with English abstract).	RCT	154
S93.4	To evaluate the effect of bee venom acupuncture on acute ankle sprain.	bee venom acupuncture	Song HS. The effect of bee venom acupuncture (BVA) on acute ankle sprain: A randomized controlled trial and double blinding-pilot study. <i>Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)</i> 2005; 8(2): 11–6 (in Korean with English abstract).	Double blind RCT	155
S93.4	To evaluate the effect of blood-letting cupping on acute ankle sprain.	cupping	Hwang JS, Lim DJ, Hwang JH, et al. Study of the effect of blood-letting cupping treatment for acute ankle sprain: A randomized controlled trial. <i>Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture &amp; Moxibustion Society)</i> 2005; 22(3): 243–52 (in Korean with English abstract).	RCT	156

ICD-10	Research Question	Interventions	References	Study Design	Page No.
S93.4	To evaluate the effect of ankle joint traction therapy on ankle sprain.	ankle joint traction therapy	Lee DY, Kim SJ. Clinical study on the ankle joint traction therapy for ankle sprain. <i>Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)</i> 2005; 15(4): 39-46 (in Korean with English abstract).	RCT	157
S93.4	To evaluate the effect of ankle meridian tendino-musculature taping on lateral ankle sprain.	meridian tendino-musculature taping	Park JM, Yoon MS, Woo I, et al. The effect of ankle meridian tendino-musculature taping on lateral ankle sprain; Randomized controlled clinical study. <i>Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)</i> 2006; 16(1): 63-71 (in Korean with English abstract).	RCT	158

## 11. Lists of Excluded References (11 references)

\* Reasons for exclusion were classified as follows:

- 1) Clinical studies that were not RCTs or meta-analyses.
- 2) Others

### 5. Psychiatric/Behavioral Disorders (1 reference)

Research Question	Interventions	Reference	Reason for Exclusion
To examine the effects of laserneedle therapy for mental stress	Acupuncture	Park HC, Kang MS, Kim LH. Effect of Laserneedle Acupuncture Therapy for Mental Stress on Heart Rate Variability. <i>Dongui-Saengli-Byeongli-Hakhoeji(Korean Journal of Oriental Physiology &amp; Pathology. )</i> 2007;18(3):113-22.	2)

### 9. Cardiovascular Diseases (1 reference)

Research Question	Interventions	Reference	Reason for Exclusion
To evaluate the effects of high voltage AC field therapy on peripheral circulatory disturbance and functional outcome of rehabilitation in CVA pateinets	High Voltage AC Field Therapy	Sung KK, Hwang CY, Lee SK et al. The Clinical Effect of High Voltage AC Field Therapy (HEALTHTRON) on Peripheral Circulatory Disturbance and Functional Outcome of Rehabilitation in CVA Patients. <i>Dongui-Saengli-Byeongli-Hakhoeji(Korean Journal of Oriental Physiology &amp; Pathology. ).</i> 2002;16(3):609-15.	1)

### 11. Diseases of the Digestive Systems (2 references)

Research Question	Interventions	References	Reason for Exclusion
To evaluate the effects of acupuncture for functional dyspepsia	Acupuncture	Park YC, Jo JH, Son CG, et al. Effect of Acupuncture Treatment for Functional Dyspepsia : A Randomized Controlled Trial. <i>Daehan-Chimgu-Hakhoeji(Journal of Korean Acupuncture &amp; Moxibustion Society).</i> 2007;24(1):1-12	2)
To evaluate the effects of acupuncture for functional dyspepsia	Acupuncture	Oh SD, Koog YH, Min JY, et al. The Clinical Studies on Dyspepsia by Using Rotatory Manipulation. <i>Daehan-Hanbang-Seonginbyeong-Hakhoeji (Journal of Korean Oriental Chronic Disease).</i> 2000;6(1):232-40	2)

### 14. Genitourinary Tract Disorder(including Climacteric Disorders) (1 reference)

Research Question	Interventions	Reference	Reason for Exclusion
To evaluate the effects of acupuncture for premenstrual syndrome	Acupuncture	Kim SC, Kim SN, Lim JA, et al. Effects of Acupuncture Treatment on the Premenstrual Syndrome: Controlled Clinical Trial. <i>Daehan-Chimgu-Hakhoeji(Journal of Korean Acupuncture &amp; Moxibustion Society).</i> 2005;22(1):41-60	2)

### 20. External causes of morbidity and mortality (2 references)

Research Question	Interventions	References	Reason for exclusion
To compare the effects of acupuncture between near and remote acupoint on ankle sprain	Acupuncture	Kim DJ, Choi YJ, Kim DH, et al. The Comparison of Effectiveness between Near Acupuncture Point Needling and Remote Acupuncture Point Needling on Treating Ankle Sprain of Acute Stage. <i>Daehan-Chimgu-Hakhoeji(Journal of Korean Acupuncture &amp; Moxibustion Society).</i> 2007;24(4):25-33.	2)
To compare the effects of acupuncture between affected and unaffected acupoint on ankle sprain	Acupuncture	Jung HK, Jeong YP, Chiang SY, et al. The Comparative Study on the Acupuncture at Affected Limb and Unaffected Limb on Treating Ankle Sprain of Acute Stage. <i>Daehan-Chimgu-Hakhoeji(Journal of Korean Acupuncture &amp; Moxibustion Society).</i> 2008;25(3):107-13.	2)

### 21. Others (4 references)

Research Question	Interventions	References	Reason for exclusion
To examine the effects of Astragali Radix Herbal Acupuncture on the heart rate variability	Astragali Radix Herbal Acupuncture	Lim ST, Kim LH, Song BM, et al. The Effects of distilled Astragali Radix Herbal Acupuncture on the Heart Rate Variability(HRV). <i>Dongui-Singyeongjeongsingwa-Hakhoeji (Journal of Oriental Neuropsychiatry).</i> 2008;19(1):107-124	2)
To evaluate the effect of Qi prenatal education-Qi Tae Gyo Qing Jing Gong-on the physical & psychological conditions of pregnant women	Qi prenatal education	Kim MN, Chun SI. The effect of Qi prenatal education-Qi Tae Gyo:Qing Jing Gong-on the physical & psychological conditions of pregnant women. <i>Daehan-Uilyo-Gigong-Hakhoeji(Journal of Korean Academy of Medical Gigong).</i> 2004;7(2):111-33.	2)
To examine the effect of Sahyangsohap-won on cerebral hemodynamics in healthy subjects	Sahyangsohap-won	Ryu SH, Koo BS, Kim SH, et al. Effects of Sahyangsohap-won on Cerebral Hemodynamics in Healthy Subjects. <i>Daehan-Hanbang-Naegwa-Hakhoeji(Korean Journal of Oriental Internal Medicine).</i> 2001;22(2):199-205.	2)
To examine the effect of Sahyangsohap-won on heart rate variability of healthy subjects	Sahyangsohap-won	Kim CH, Hwang JW, Min IK, et al. The Effect of Sahyangsohapwon on Heart Rate Variability of Healthy Subjects. <i>Daehan-Hanui-Hakhoeji (Journal of Korean Oriental Medicine).</i> 2009;30(1):120-7.	2)

## **9. Structured Abstracts**

**(132 abstracts describing RCTs)**





## 2. Cancer

### Reference

Cho JH, Chung WK, Kang W, et al. Manual acupuncture improved quality of life in cancer patients with radiation-induced xerostomia. *Journal of Alternative and Complementary Medicine* 2008; 14(5): 523–6.

#### 1. Objectives

To investigate the effects of manual acupuncture on objective and subjective symptoms in cancer patients with radiation-induced xerostomia.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Dunsan Oriental Hospital of Daejeon), Republic of Korea.

#### 4. Participants

Twelve (12) patients (male/female = 10/2; median age, 44 years; age range, 37–72) with head-neck cancer who received radiation therapy (minimum irradiation dose >38 Gy, >50% of the dose to the parotid gland).

#### 5. Intervention

Arm 1: (RA group): Treatment with acupuncture for 20 min at the Jiache (ST6, 頰車), Hegu (LI4, 合谷), Zusanli (ST36, 足三里), and Sanyinjiao (SP6, 三陰交) acupuncture points twice a week for 6 weeks (n=6).

Arm 2: (SA group): Treatment with acupuncture at sham points 2 cm from the real acupuncture points (n=6).

#### 6. Main outcome measures

Total salivary flow rate (stimulated, unstimulated), xerostomia questionnaire (XQ) score.

#### 7. Main results

- 1) Both the RA and SA groups showed an increase in unstimulated salivary flow rate. Especially in the RA group, salivary flow rate was markedly increased after 6 weeks of treatment compared with the pre-treatment rate (Wilcoxon rank-sum test,  $P<0.05$ ).
- 2) The RA group showed an increase in stimulated salivary flow rate, but there was no meaningful between-group difference in stimulated salivary flow rate.
- 3) The XQ score after 6 weeks was significantly increased in the RA group compared to the SA group (Wilcoxon rank-sum test,  $P<0.05$ ).

#### 8. Conclusions

Treatment (RA) significantly increases unstimulated salivary flow rate and improves the quality of life (QOL) of head-neck cancer patients with radiation-induced xerostomia.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

This article verified the effectiveness of traditional acupuncture for ameliorating symptoms of radiation-induced xerostomia in 12 patients with head-neck cancer. The treatment group (RA) received acupuncture for 20 min at the acupuncture points Jiache, Hegu, Zusanli, and Sanyinjiao twice a week for 6 weeks. The control group received acupuncture at sham points 2 cm from each acupuncture point. The stimulated and unstimulated total salivary flow rate and XQ score were compared between the two groups. RA resulted in better salivary flow rate and XQ score. However, the absence of a significant between-treatment difference suggests that sham acupuncture also had an effect. As the number of patients in the study was small, it is difficult to demonstrate a significant effect of acupuncture on xerostomia. Moreover, previous studies examining the effects of acupuncture on xerostomia showed different results. Therefore, large scale clinical trials comparing acupuncture with sham acupuncture should be performed to clarify their effects on xerostomia.

#### 11. Abstractor

Kim JS, 8 June 2010.

## 2. Cancer

### Reference

Yoo WS, Kim JS. The effect of sweet bee venom pharmacopuncture (SBVP) on cancer-related pain: A randomized controlled trial and double blinded - pilot study. *Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)* 2008; 11(1): 2–29 (in Korean with English abstract).

### 1. Objectives

To investigate the effect of sweet bee venom pharmacopuncture (SBVP) on cancer-related pain.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (Dunsan Oriental Hospital of Daejeon), Republic of Korea.

### 4. Participants

Eleven patients (age, 18–70 years; male/female ratio = 8/3) with cancer-related pain over three days and mean Numeric Rating Scale (NRS) pain score greater than 3.

### 5. Intervention

Arm 1: SBV (preparation concentration 0.1 mg/ml) was injected daily for 5 days at the Zhong Wan (CV12, 中脘) acupuncture point using a 1-cc syringe.

Arm 2: Saline was injected according to the same schedule.

### 6. Main outcome measures

NRS pain scale pain score.

### 7. Main results

One hour after injection, the decrease in NRS score was significantly greater in Arm 1 than in Arm 2 ( $2.48 \pm 1.52$  vs.  $0.97 \pm 1.88$ ;  $P < 0.05$ ). Also, the NRS pain scale score was significantly lower shortly after the SBV injection (pre- vs. post-injection:  $5.13 \pm 1.77$  vs.  $2.65 \pm 0.67$ ,  $P < 0.05$ ) but not significantly lower long after SBV injection (pre- vs. post-treatment values not significantly different).

### 8. Conclusions

In the control of cancer-related pain, SBVP dramatically decreases NRS pain score in the short term, but not in the long term. This result indicates that SBVP could be helpful in the control of breakthrough pain.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This purpose of the article was to verify the effectiveness of SBVP for the control of cancer-related pain in patients with different types of cancer including gastric cancer. Compared with saline injection, SBVP injection daily for 5 days at the Zhong Wan acupuncture point reduced breakthrough pain. However, the study had limitations including the small number of patients and nonspecification of target diseases related to gastralgia such as gastric cancer. The clinical study design should be changed to protect patients, and studies with larger numbers of patients should be performed.

### 11. Abstractor

Kim JS, 8 June 2010.

### 3. Blood Diseases including Anaemia

#### Reference

Seo SH, Park SE, Hong SH, et al. Clinical effects of Sayuktanggami-bang on cerebral vascular accident patients with normocytic normochromic anemia. *Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)* 2005; 26(4): 795–805 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effects of Sayuktanggami-bang (四六湯加味方) on normocytic normochromic anemia.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (details not mentioned), Republic of Korea.

#### 4. Participants

Thirty-four patients who were hospitalized by stroke and had normocytic normochromic anemia (male/female ratio = 16/18).

#### 5. Intervention

Arm 1: Treatment with Sayuktanggami-bang (四六湯加味方) (n=19).

Arm 2: Treatment with other herbs based on Li gi geo poong (理氣祛風, regulating Ki and dispelling wind), Gae gyu seong sin (開竅醒神, opening the eyes, nose, mouth, and ears, and recovering one's senses) (n=15).

#### 6. Main outcome measures

Red blood cell (RBC) count, hematocrit (HcT), and hemoglobin (Hb) level.

#### 7. Main results

Sayuktanggami-bang treatment resulted in a statistically significant pretreatment-to-posttreatment change ( $P<0.01$ ) in RBC count from  $351.9 \pm 33.7$  to  $368.3 \pm 31.2$  ( $\times 10^4 \mu\text{l}$ ), Hb from  $10.9 \pm 0.9$  to  $11.5 \pm 0.9$  (g/dl), and Hct from  $32.4 \pm 2.5$  to  $33.8 \pm 2.7\%$ . However, these changes were not significantly different from those due to control treatment.

#### 8. Conclusions

Sayuktanggami-bang improves normocytic normochromic anemia in stroke patients.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

This study compared the ability of Sayuktanggami-bang treatment and traditional drug treatment for stroke to elicit changes in RBC count, HcT, and Hb in 34 patients hospitalized for stroke with normocytic normochromic anemia. This study did not target the true anemias, did not specify how informed consents were obtained, did not specify how the number of patients was determined, and did not specify whether treatment assignment was random. But to consider the difficulties of the clinical trial of Oriental medicine, I just presented this clinical trial as a model case that evaluates a treatment for blood disorders.

#### 11. Abstractor

Kim JS, 9 June 2010.

## 4. Metabolism and Endocrine Diseases

### Reference

You WK, Lee MJ, Oh JG. The effects of auricular acupuncture for obesity on the change of hormone and energy metabolism during weight control of veteran taekwondo players. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2000; 10(1): 133–45 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of auricular acupuncture on energy and hormone metabolism.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (details not mentioned), Republic of Korea.

### 4. Participants

Twenty male and female national taekwondo athletes.

### 5. Intervention

Arm 1: Treatment with two rounds of auricular acupuncture (three days per round) (n=10).

Arm 2: Control (no treatment) (n=10).

### 6. Main outcome measures

- 1) Urine levels of electrolytes (Na, K, and Cl), cortisol, epinephrine, and norepinephrine.
- 2) Blood levels of glucose, total cholesterol, low density lipoprotein (LDL)-cholesterol, high density lipoprotein (HDL)-cholesterol, and leptin.

### 7. Main results

- 1) The urinary Na level was significantly lower in the treatment group than the control group, but the between-group difference in urinary K and Cl levels was not significant.
- 2) The urinary cortisol and epinephrine levels were increased, and urinary norepinephrine level was decreased in both groups, However, there was no significant between-group difference in these levels.
- 3) There were no significant between-group differences in blood glucose and lipid levels.
- 4) The blood leptin was significantly decreased in the treatment group.

### 8. Conclusions

The treatment increases urinary Na, K, Cl, cortisol, and epinephrine levels, but decreases leptin level significantly.

### 9. Safety assessment in the article

Several athletes complained of slight headache or insomnia after treatment.

### 10. Abstractor's comments

This study is about the influence of auricular acupuncture on the levels of urinary electrolytes and blood hormones in national taekwondo athletes. The treatment increased urinary levels of Na, K, Cl, cortisol, and epinephrine, but decreased leptin level significantly, so it is expected that the auricular acupuncture causes body weight loss without excessive food restriction. But to arrive at a definitive conclusion on the effectiveness of this treatment, a large long-term controlled clinical trial should be carried out.

### 11. Abstractor

Lee BC, 21 June 2010.

## 4. Metabolism and Endocrine Diseases

### Reference

Lee AR, Cho YJ, Jung WS, et al., The effects of Sobi-eum (Xiaofei-yin) mesotherapy on abdominal fat distribution, *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2009; 19(2): 261–73 (in Korean with English abstract).

### 1. Objectives

To examine the therapeutic effect of Sobi-eum (Xiaofei-yin [消肥飲]) mesotherapy on abdominal obesity.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Hospital at Gangdong), Republic of Korea.

### 4. Participants

Forty women with abdominal obesity (age, 20–55 years old; premenopausal; body mass index [BMI] ( $\text{kg}/\text{m}^2$ ), over 25; waist circumference, over 85 cm).

### 5. Intervention

Arm 1: Treatment group (n=20). Abdominal injection of Sobi-eum (Xiaofei-yin [消肥飲]) herbal acupuncture fluid for 6 weeks (twice a week).

Arm 2: Control group (n=20). Abdominal injection of saline for 6 weeks (twice a week).

Four subjects (2 in Arm 1, 2 in Arm 2) dropped out.

### 6. Main outcome measures

Waist circumference, weight, body fat mass, body fat percentage, skeletal muscle percentage, visceral fat mass, abdominal fat (on computed tomography [CT] scans).

### 7. Main results

1) Waist circumference, weight, body fat mass, body fat percentage, body skeletal muscle percentage, visceral fat mass, fat area, subcutaneous fat, and visceral fat were significantly decreased at the end of treatment ( $P<0.01$ ), but there was no significant between-group difference in these measures.

2) After treatment, the decrease in total abdominal fat area paralleled that in total fat area.

### 8. Conclusions

Sobi-eum (Xiaofei-yin) mesotherapy reduces visceral fat in obese women. These data may provide a basis for extending the application of mesotherapy and obesity treatment in the future.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This randomized, controlled clinical trial evaluates the efficacy of Sobi-eum (Xiaofei-yin) mesotherapy in women with abdominal obesity. Its efficacy demonstrated in the treatment of visceral obesity suggests its possible efficacy in the treatment of other forms of obesity. But as the number of subjects were small and the trial period was relatively short, additional clinical trials are needed to confirm the efficacy.

### 11. Abstractor

Lee BC, 21 June 2010.

## 4. Metabolism and Endocrine Diseases

### Reference

Kim SC, Jang EH, Na WM, et al. A pilot study of Sa-am acupuncture treatment used by sham acupuncture for the simple obesity. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2007; 24(5): 67–88 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of Sa-am acupuncture (舍岩鍼) treatment in women with simple obesity.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One oriental hospital (Oriental Medical Hospital at Gwangju, Wonkwang University), Republic of Korea.

### 4. Participants

Sixty women with simple obesity, age 20–25 years old, body mass index (BMI) over 25.

### 5. Intervention

Arm 1: Real acupuncture group (n=18). Treatment with Sa-am acupuncture for 4 weeks (30 min per treatment, 3 treatments per 1 week) + the rules of health.

Arm 2: Sham acupuncture group (n=18). Treatment (double-blinded) with intradermal acupuncture for 4 weeks (30 min per treatment, 3 treatments per week) + the rules of health.

Arm 3: Control group (n=24). Treatment with the rules of health only.

Twenty seven subjects (10 in Arm1, 5 in Arm2, 12 in Arm3) dropped out.

### 6. Main outcome measures

- 1) Body weight, percent body fat.
- 2) Blood levels of lipids (cholesterol, triglyceride, high density lipoprotein [HDL]-cholesterol, and low density lipoprotein [LDL]-cholesterol).

### 7. Main results

- 1) The real acupuncture group showed weight loss after the treatment, but no change in body fat mass and cholesterol, triglyceride, HDL-cholesterol, and LDL-cholesterol levels.
- 2) The sham acupuncture group and control group showed no change in any outcome measure.
- 3) There were no among-group differences in any outcome measure after the end of the study.

### 8. Conclusions

No meaningful among-group differences were observed. Only the real acupuncture group showed body weight loss, which may be regarded as a preliminary finding.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This clinical trial evaluated the efficacy of Sa-sam acupuncture in the treatment of simple obesity. To analyze the efficacy objectively, the design was double blind, randomized, and triple arm. However, the drop-out rate was high, differences in outcome measures were insignificant, and verification of efficacy was limited. A well organized clinical trial will be needed.

### 11. Abstractor

Lee BC, 28 May 2010.

## 4. Metabolism and Endocrine Diseases

### Reference

Kim SJ, Kim HJ, Ko BP, et al. Effect of *Ephedra Sinica* and *Evodia Rutaecarpa* on resting metabolic rate in obese premenopausal women during low-calorie diet: A randomized controlled clinical trial. *Hanbang-Biman-Hakhojei (Journal of Korean Oriental Association for Study of Obesity)* 2004; 4(1): 45–54 (in Korean with English abstract).

### 1. Objectives

To evaluate the therapeutic effect of *Ephedra Sinica* (麻黃) and *Evodia Rutaecarpa* (吳茱萸) on obesity in women.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (Bundang-Cha Oriental Hospital), Republic of Korea.

### 4. Participants

Ninety premenopausal women of childbearing age over 21 years old (body mass index  $\geq 25$  kg/m<sup>2</sup>)

### 5. Intervention

Arm 1: Placebo group (n=30). Treatment was a 1200-kcal per day diet and placebo for 8 weeks.

Arm 2: *Ephedra Sinica* (麻黃) group (n=30). Treatment was a 1200-kcal per day diet and 6 g of *Ephedra Sinica* for 8 weeks (twice a day).

Arm 3: *Evodia Rutaecarpa* (吳茱萸) group (n=30). Treatment was a 1200-kcal per day diet and 6 g of *Evodia Rutaecarpa* for 8 weeks (twice a day).

Fifty patients (16 in Arm1; 14 in Arm2; 20 in Arm 3) dropped out.

### 6. Main outcome measures

- 1) Resting metabolic rate measured by portable indirect calorimetry.
- 2) Body weight, percent body fat, body fat mass, and waist-to-hip ratio measured using a body composition analyzer.

### 7. Main results

- 1) The resting metabolic rate increased significantly in the *Ephedra Sinica* group (average score, 90.0) after 4 weeks as compared with the placebo group (average score, -82.8), but not in the *Evodia Rutaecarpa* group.
- 2) Body weight decreased in the *Ephedra Sinica* group after 4 weeks (average 2.6) and 8 weeks (average 3.63) compared with the placebo group but was similar in the *Evodia Rutaecarpa* and placebo groups.
- 3) The percent body fat was significantly decreased in the *Ephedra Sinica* group after 4 and 8 weeks, but not in the *Evodia Rutaecarpa* and placebo groups.

### 8. Conclusions

*Ephedra Sinica* treatment significantly increases the resting metabolic rate after 4 weeks and decreases body weight and percent body fat after 4 and 8 weeks.

### 9. Safety assessment in the article

Hypersensitivity and other adverse reactions were observed in 8 of 30 women who dropped out.

### 10. Abstractor's comments

This clinical trial evaluated the effect of *Ephedra Sinica* and *Evodia Rutaecarpa* on resting metabolic rate and body composition of obese women of childbearing age. Treatment was found to increase resting metabolic rate and decrease percent body fat. The design was randomized, placebo controlled, and double-blind, so the reliability of the results was high and the results could have implications for the treatment of obese women.

### 11. Abstractor

Lee BC, 28 May 2010.

## 4. Metabolism and Endocrine Diseases

### Reference

Kim TK, Jung WS, Park SU, et al. Comparison of efficacy and safety between Chunghyul-dan (HH-333) and Atorvastatin (Lipitor®). *Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)* 2003; 24(4): 837–45 (in Korean with English abstract).

### 1. Objectives

To compare the efficacy of Chunghyul-dan (清血丹) with that of atorvastatin (Lipitor®) in lowering lipid levels.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital and one Western hospital (2 hospitals) (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Sixty-two hyperlipidemia patients with total cholesterol level of over 240 mg/dl or LDL-cholesterol level of over 160 mg/dl.

### 5. Intervention

Arm 1: Low-dose Chunghyul-dan (清血丹) treatment group (n=33). Treatment with chunghyul-dan for 8 weeks (2 capsules per day).

Arm 2: High-dose Chunghyul-dan (清血丹) treatment group (n=16). Treatment with Chunghyul-dan for 8 weeks (4 capsules per day).

Arm 3: Atorvastatin treatment group (n=13). Treatment with atorvastatin (10 mg per day).

### 6. Main outcome measures

- 1) Total cholesterol, low density lipoprotein (LDL)-cholesterol, high-density lipoprotein (HDL)-cholesterol, triglyceride, total lipid, and phospholipid levels.
- 2) Aspartate aminotransferase (AST), alanine aminotransferase (ALT), blood urea nitrogen (BUN), and creatinine levels.

### 7. Main results

- 1) Chunghyul-dan (both doses) and atorvastatin significantly decreased total cholesterol, LDL-cholesterol, total lipid, and phospholipid levels.
- 2) There were no significant between or among-group differences in total cholesterol, LDL-cholesterol, HDL-cholesterol, triglyceride, total lipid, and phospholipid at the end of the trial.
- 3) Low and high doses (2 and 4 capsules, respectively) of Chunghyul-dan produced similar decreases in outcome measures.

### 8. Conclusions

Treatment with Chunghyul-dan and atorvastatin can decrease levels of blood lipids. No adverse events or side effects were observed, suggesting the safety of Chunghyul-dan as treatment for hyperlipidemia.

### 9. Safety assessment in the article

Chunghyul-dan and atorvastatin were not associated with hepatotoxicity or nephrotoxicity. There were no significant between-group differences between the two groups in biochemical parameters including AST, ALT, BUN and creatinine.

### 10. Abstractor's comments

In this study, the therapeutic effect of Chunghyul-dan on serum lipids was comparable to that of the conventional hyperlipidemia drug, atorvastatin. Although this clinical trial used a Western drug control instead of a placebo control and involved comparing patients who were not randomized, it is suggested that the lipid lowering effect and safety of Chunghyul-dan was demonstrated and can be regarded as a clinical basis for using the drug to treat hyperlipidemia.

### 11. Abstractor

Lee BC, 28 May 2010.



## 4. Metabolism and Endocrine Diseases

### Reference

Park SH. Effects of Yak-Sun tea prescription from Oriental medicinal herbs for serum lipid levels and oxidative stress in hyperlipidemic women. *Dongui-Saengli-Byeongli-Hakhoeji (Korean Journal of Oriental Physiology & Pathology)* 2006; 20(5): 1180–6 (in Korean with English abstract).

### 1. Objectives

To examine the effects of Yak-Sun tea (藥膳茶: Koekac, Sansa, Heshouwu, Wulong) on blood lipid levels and oxidative stress in hyperlipidemic women.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (details not mentioned), Republic of Korea.

### 4. Participants

Forty career women (30–45 years old) diagnosed as having hyperlipidemia.

### 5. Intervention

Arm 1: Patients consumed Yak-Sun tea (藥膳茶, 10 g) twice a day for 14 days (n=20).

Arm 2: Control. Patients consumed 1000 ml of 0.02% xylitol water twice a day for 14 days (n=20).

### 6. Main outcome measures

- 1) A measure of dietary uptake.
- 2) Concentration of various blood lipids.
- 3) Units of active oxygen measured by the H<sub>2</sub>O<sub>2</sub> test.

### 7. Main results

- 1) Lipid uptake and animal protein uptake were increased in Arm 1.
- 2) Blood glucose level was significantly higher in Arm 1 ( $83.2 \pm 4.4$  mg/dl vs.  $60.1 \pm 2.05$  mg/dl). Serum homocysteine level was significantly lower in Arm 1 ( $8.42 \pm 1.11$   $\mu$ mol/L vs.  $10.2 \pm 1.6$   $\mu$ mol/L).
- 3) HDL-cholesterol level was significantly higher in Arm 1 (66.2 mg/dl vs. 51.2 mg/dl, while LDL-cholesterol level was significantly lower (96.2 mg/dl vs. 108.7 mg/dl).
- 4) Active oxygen level was significantly lower in Arm 1.

### 8. Conclusions

Yak-Sun tea intake significantly increases HDL-cholesterol level but decreases LDL-cholesterol homocysteine levels in women with hyperlipidemia. This objective study provides basic data and a scientific approach to the study of herbs as functional foods.

### 9. Safety assessment in the article

No unusual adverse effects were observed.

### 10. Abstractor's comments

Yak-Sun can reduce overweight, obesity, and hyperlipidemia. This study reported that Yak-Sun tea improves hyperlipidemia. Yak-Sun tea used in this study was a mixture of Koekac, Sansa, Heshouwu, and Wulong and its administration followed Monarch (jun)· Minister (chen)· Adjuvant (zou)· Guide (shi) (君臣左使) principles, so it acts by Yang gan ik sin (養肝益腎, nourishing the liver and kidney), Kang Ji Gambi (降脂減肥, lowering fat and reducing obesity), Saeng bal oh bal (生髮烏髮, promoting the growth of hair and black hair), and Yeonn yeon ik su (延年益壽, prolonging life,). There are reports that Yak-Sun tea improves hypertension, hyperlipidemia, arteriosclerosis, coronary arteriosclerosis, diabetes, obesity, and alopecia, and reverses the graying of hair and aging. The study was too short (14 days) to establish definite efficacy. The results of this study suggest that Yak-Sun tea may be a functional food and that herbal dietary supplements may have efficacy.

### 11. Abstractor

Lee BC, 28 May 2010.

## 4. Psychiatric/Behavioral Disorders

### Reference

Jeong MS, Choi WJ, Lee KW, et al, The effects of acupuncture stimulation on skin conductance response of anxiety patients and normal subjects. *Dongui-Singyeongjeongsingwa-Hakhoeji (Journal of Oriental Neuropsychiatry)* 2009; 20(2): 101–10 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of acupuncture stimulation on the skin conductance response of patients with anxiety and normal subjects.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (details not mentioned), Republic of Korea.

### 4. Participants

All participants signed informed consent forms from January 2007 to September 2007. There were 30 patients with anxiety who received scores of 41 (in males) or 42 (in females) on the state anxiety inventory, and 42 (in males) or 44 (in females) on the trait anxiety inventory of the Korean version of Spielberger's State-Trait Anxiety Inventory-Y form (STAI-Y form) and 15 normal subjects.

### 5. Intervention

Arm 1: Treatment group (n=15 anxiety patients). Acupuncture treatment at the Shenmen (H7, 神門) and Neiguan (P6, 內關) acupuncture points.

Arm 2: Control group (n=15 anxiety patients). Sham needle treatment at the Shenmen (H7, 神門) and Neiguan (P6, 內關) acupuncture points.

Arm 3: Normal group (n=15 normal subjects). Acupuncture treatment at the Shenmen (H7, 神門) and Neiguan (P6, 內關) acupuncture points.

### 6. Main outcome measures

Skin conductance response (SCR) and STAI score.

### 7. Main results

1) There was a significant decrease in the SCR of all three groups during acupuncture stimulation at the Shenmen and Neiguan acupuncture points. The decrease in SCR differed significantly between the treatment and control groups in first 5 minutes of the second round of treatment.

2) STAI score decreased significantly in both the treatment and control groups.

### 8. Conclusions

Stimulation of the Shenmen and Neiguan acupuncture points can reduce the activity of the sympathetic nervous system.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the effect of acupuncture stimulation on the sympathetic nervous system of patients with anxiety. Activity of sympathetic nervous system of patient with anxiety was more activated than normal subjects. SCR was significantly decreased in all three groups. This is due to the failure to establish an optimal control group for the effects of patient expectation, the relationship with acupuncturist, and placebo. Hence, the limitations of acupuncture control research should be studied.

### 11. Abstractor

Cho SH, 13 July 2010.

## 6. Nervous System Diseases

### Reference

Jung JC, Kim KH, Park YC, et al. The Study on the effect of acupuncture on UPDRS and heart rate variability in the patients with idiopathic Parkinson's disease. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2006;23(3)143–153 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of acupuncture stimulation of the Taichong (LR3 太沖) and Yanglingquan (GB34, 陽陵泉) acupuncture points on UPDRS and HRV parameters in patients with idiopathic Parkinson's disease.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Thirty-seven (37) patients with idiopathic Parkinson's disease.

### 5. Intervention

Arm 1: Test group (n=16). Acupuncture treatment at the Taichong (LR3, 太沖) and Yanglingquan (GB34, 陽陵泉) acupuncture points.

Arm 2: Control group (n=21). Acupuncture approximately 3 cm (1 chon, 寸) away from the Taichong (LR3, 太沖) and Xuanzhong (GB 39, 懸鐘) acupuncture points.

### 6. Main outcome measures

UPDRS score, HRV parameter scores (SDNN, LF, HF, LF/HF ratio).

### 7. Main results

1) Treatment significantly decreased UPDRS score from  $38.4 \pm 18.6$  to  $28.0 \pm 16.8$  in the test group and from  $34.6 \pm 20.7$  to  $26.9 \pm 19.9$  in the control group. The decrease was similar in both groups.

2) The SDNN score of HRV parameters improved in both the test group (from  $23.7 \pm 10.7$  to  $25.9 \pm 17.5$ ) and control group (from  $25.8 \pm 19.1$  to  $22.9 \pm 9.4$ ), but no significant between-group difference in these variables was apparent.

### 8. Conclusions

Acupuncture treatment at the Taichong and Yanglingquan acupuncture points provides symptomatic relief to patients with idiopathic Parkinson's disease.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This randomized, controlled clinical trial evaluated the effect of acupuncture stimulation at the Taichong and Yanglingquan acupuncture points on UPDRS and HRV parameters in patients with idiopathic Parkinson's disease. As patients with idiopathic Parkinson's disease have no clear treatment options, acupuncture treatment may have value in that it relieves Parkinson's disease symptoms. However, since there was no significant between-group differences in UPDRS and HRV parameters, it is difficult to conclude that acupuncture treatment provides symptom relief. Moreover, every patient who participated in this study had acupuncture treatment and other diseases. Thus, the placebo effect cannot be entirely excluded. Finally, as the median pathway of acupuncture points used in the test group was identical to that used in the control group, it is also possible that stimulation of the acupuncture points used in the control group had a similar effect.

### 11. Abstractor

Lee EJ, 26 May 2010.

## 6. Nervous System Diseases

### Reference

Kim HB, Lee MH, Lee SY, et al. The comparative study on the effect of constitution-dependent acupuncture treatment for idiopathic Parkinson's disease on heart rate variability. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2007; 24(3): 163–74 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of constitution-dependent acupuncture on heart rate variability (HRV) of patients with idiopathic Parkinson's disease.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Fifty-six patients with idiopathic Parkinson's disease.

### 5. Intervention

Arm 1: Constitution-dependent acupuncture treatment group (test group, n=8).

Arm 2: Acupuncture point acupuncture treatment group (standard group, n=16).

Arm 3: Control group (n=12).

Nineteen subjects dropped out during the trial.

### 6. Main outcome measures

HRV parameters (standard deviation of normal to normal RR intervals [SDNN], total power [TP], low frequency [LF], high frequency [HF] norm, etc.)

### 7. Main results

- 1) In the test group, Acupuncture treatment caused a significant change in SDNN, TP, LF, and HF norm values.
- 2) In the standard group, acupuncture treatment caused a significant change in SDNN, TP, LF values.
- 3) Covariate analysis revealed a statistically significant difference in SDNN and LF values. There was a significant difference in SDNN between the test group and standard group, and between the test group and control group, and a significant difference in LF between the test group and control group.

### 8. Conclusions

Constitution-dependent acupuncture is very effective in patients with Parkinson's disease.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This randomized controlled trial evaluates the effect of constitution-dependent acupuncture on the heart rate variability (HRV) of patients with idiopathic Parkinson's disease. This study assessed the state of the autonomic nervous system and the effect of acupuncture on HRV parameters, which are considered to be surrogate measures of the severity of Parkinson's disease symptoms. However, the number of subjects in each group was small, and the difference in HRV parameters between constitution-dependent acupuncture and acupuncture at the Taichong (LR3, 太冲), Yanglingquan (GB34, 陽陵泉), and Zusanli (ST36, 足三里) acupuncture points was insignificant. More indepth studies of these differences in patients with Parkinson's disease treated with various acupuncture therapies are needed.

### 11. Abstractor

Lee EJ, 26 May 2010.

## 6. Nervous System Diseases

### Reference

Park YC, Jang DI, Lee YH, et al. A study on the effect of acupuncture treatment in patients with idiopathic Parkinson's disease. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2007; 24(4): 43–54 (in Korean with English abstract).

### 1. Objectives

To evaluate the therapeutic effect of acupuncture point acupuncture treatment in patients with idiopathic Parkinson's disease.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Fifty-six patients with idiopathic Parkinson's disease.

### 5. Intervention

Arm 1: Constitution-dependent acupuncture treatment group (n=12).

Arm 2: Standard acupuncture point acupuncture treatment group (n=21).

Arm 3: Control group (n=13).

### 6. Main outcome measures

Unified Parkinson's Disease Rating Scale (UPDRS) score, modified Hoehn and Yahr (H-Y) Staging Scale score, Activities of Daily Living (ADL) index, Freezing of Gait Questionnaire (FOGQ) score.

### 7. Main results

1) There was a significant difference in UPDRS IV score and UPDRS total score between the constitution-dependent acupuncture and control groups and between the standard and control groups.

2) There was a significant difference in FOGQ score between the constitution-dependent acupuncture treatment group and the standard and control groups.

### 8. Conclusions

Decrease in UPDRS and FOGQ scores suggest that acupuncture relieves symptoms and improves the quality of life in patients with Parkinson's disease. The effect of constitution-dependent acupuncture treatment on UPDRS IV, UPDRS total score, and FOGQ score suggest that patients with idiopathic Parkinson's disease could benefit from this treatment.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This randomized, controlled clinical trial evaluated the efficacy of constitution-dependent acupuncture treatment in patients with idiopathic Parkinson's disease. The approaches tried in this study varied and depended on the individual case. This study also found significant differences in the results of constitution-dependent acupuncture and acupuncture point acupuncture. Yet more indepth studies on the specificity of treatment and acupuncture treatment technology based on principles of traditional Korean medicine are needed.

### 11. Abstractor

Lee EJ, 26 May 2010.

## 6. Nervous System Diseases

### Reference

Jung IT, Lee SH, Kim SY, et al. A clinical study of East-West pain treatment on chronic headache patients. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2005; 22(3): 93–104 (in Korean with English abstract).

### 1. Objectives

To compare the effect of clinical Oriental medical treatment and East-West combined medical treatment on chronic headache.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital and one Western hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Patients (age: 18–65 years) with tension headache or migraine headache with/without pre-headache symptoms according to the International Headache Society (HIS) criteria. The headaches lasted more than 4 hours a day and occurred on more than 15 days a month (n=92).

### 5. Intervention

Arm 1: Oriental medical treatment group. Acupuncture applied to the Baihui (GV20, 百會), Sishencong (EX-HN1, 四神聰), Touwei (ST8, 頭維), Taiyang (EX-HN5, 太陽), Yifeng (TE17, 翳風), Fengchi (GB20, 風池), Quchi (LI11, 曲池), Hegu (LI4, 合谷), Zusanli (ST36, 足三里), and Taichong (LR3, 太衝) acupoints for 20 minutes (n=43).

Arm 2: East-West combined medical treatment group. Acupuncture + Nerve block therapy (Stellate ganglion block, laryngeal nerve block, 2<sup>nd</sup> cervical nerve block)(n=49).

### 6. Main Outcome Measures

Pain assessed on a visual analogue scale (VAS), Brief Pain Inventory (BPI).

### 7. Main Results

In Arm 1, the average VAS score and BPI subscores for general activity, mood, and enjoyment of life were significantly improved after one month of treatment and BPI subscores for relations with other people and sleep were significantly improved after two months of treatment. In Arm 2, the average VAS score and all BPI subscores were significantly improved after one month of treatment. There was no between-group difference in VAS and BPI scores after 4 weeks of treatment, but the improvement in VAS score and enjoyment of life, relations with other people, and sleep subscores was significantly greater in Arm 2 after 8 weeks of treatment.

### 8. Conclusions

East-West combined medical treatment relieves chronic headache and improves the quality of life. East-West combined medical treatment is more effective than acupuncture only treatment.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study compared the efficacy of East treatment (acupuncture) and with that of East-West treatment (acupuncture + nerve block therapy). Through VAS and BPI score analysis, the greater effectiveness of East-West treatment for chronic headache was confirmed, but the randomization method was not mentioned. It is suggested that additional evaluations of the effectiveness are needed. It is clinically meaningful in that this study is a randomized, controlled trial of headache remedy. Reference: Acupuncture was compared to nerve block therapy in “Choi DY, Lim SB, Cha NH, et al. Effects on pain behavior in non-medicinal treatment applied to chronic headache patients. *The Korean Journal of Meridian & Acupoint* 2005; 22(1): 55–66”.

### 11. Abstractor and date

Jang KT, 31 August 2010.

## 6. Nervous System Diseases

### Reference

Hong KE, Park YC, Cho JH et al. Effect of Sa-am acupuncture method for chronic tension-type headache: A randomized controlled trial. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2007; 24(1): 13–28 (in Korean with English abstract).

### 1. Objectives

To examine the effects of Sa-am acupuncture (舍岩鍼) on chronic tension-type headache.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Dunsan Oriental Hospital), Republic of Korea.

### 4. Participants

Twenty-six patients with chronic tension-type headache diagnosed according to International Headache Society (IHS) second edition criteria.

### 5. Intervention

Arm 1: Acupuncture treatment group (n=13).

Arm 2: Control group (acupuncture points not located on the meridian; n=13).

### 6. Main outcome measures

Primary end point: pain score measured on a visual analogue scale (VAS).

Secondary end point: headache disability inventory (HDI) score and six-point Likert scale (SLS).

### 7. Main results

The difference in VAS score between the treatment and control groups before the treatment, immediately after the treatment, and 2, 4, and 24 hrs (next day) after treatment was  $2.21 \pm 8.53$ ,  $-9.56 \pm 6.47$ ,  $-5.48 \pm 7.58$ ,  $-4.99 \pm 8.29$ , and  $-4.57 \pm 6.26$ , respectively. In both groups, acupuncture treatment tended to improve HDI score and SLS, but there was no statistically significant between-group difference in the effect.

### 8. Conclusions

The Sa-am acupuncture treatment relieves chronic tension-type headache and improves quality of life.

### 9. Safety assessment in the article

No adverse events were identified at follow-up, immediately before the end of the clinical trial.

### 10. Abstractor's comments

This randomized, controlled clinical trial evaluated the effect of Sa-am acupuncture on chronic tension-type headache. This study was objective and the clinical trial method and basic data can be used to investigate the clinical effectiveness of Sa-am acupuncture. Since no statistically significant between-group difference in VAS score was detected, I think it is difficult to conclude that Sa-am acupuncture treatment relieves chronic tension-type headache. Therefore, additional research on various acupuncture treatments with different treatment periods and follow-up periods are needed.

### 11. Abstractor

Lee EJ, 26 May 2010.

## 6. Nervous System Diseases

### Reference

Kwak BM, Kim MJ, Kim YM, et al. Persistent effects of acupuncture on chronic tension-type headache: A randomized controlled trial. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2008; 25(2): 165–77 (in Korean with English abstract).

### 1. Objectives

To determine the persistent effects of acupuncture treatment on chronic tension-type headache.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Dunsan Oriental Hospital), Republic of Korea.

### 4. Participants

Thirty-two patients with chronic tension-type headache diagnosed according to International Headache Society (IHS) second edition criteria.

### 5. Intervention

Arm 1: Acupuncture treatment group (n=17).

Arm 2: Control group (acupuncture points not located on the meridian; n=15).

### 6. Main outcome measures

Primary end point: pain score measured on a visual analogue scale (VAS).

Secondary end point: headache disability inventory (HDI) score, six-point Likert scale (SLS), and algometer score.

### 7. Main results

1) VAS score decreased significantly at 4, 8, and 12 weeks ( $15.2 \pm 14.1$ ,  $16.1 \pm 14.7$ , and  $14.4 \pm 18.5$ , respectively) after acupuncture treatment, and at 4 weeks ( $14.6 \pm 18.5$ ) after control treatment. Although acupuncture treatment tended to reduce headache pain (i.e., decrease VAS score, HDI score, and SLS) compared with the control treatment, there was no statistically significant difference between the treatments.

2) Algometer score decreased in the treatment group and indicated a tendency to relieve pain on the right side compared to the control group, and to provide statistically significant relief of pain on the left side. Algometer score changes over time became statistically significant for both the left and right sides in both groups.

### 8. Conclusions

Acupuncture treatment relieves chronic tension-type headaches and temporal muscle strain.

### 9. Safety assessment in the article

No adverse events were identified at follow-up, immediately before the end of the clinical trial.

### 10. Abstractor's comments

This randomized, controlled study evaluated the persistent effects of acupuncture treatment on chronic tension-type headache. This study showed that the effects of acupuncture treatment were persistent, and that acupuncture was safe (i.e., had no side effects). However, there was no statistically significant between-group difference in the primary end point (VAS score), so I think it is difficult to conclude that acupuncture treatment reduces chronic tension-type headache. Also, the follow up period was too short, so additional research is needed.

### 11. Abstractor

Lee EJ, 26 May 2010.



## 6. Nervous System Diseases

### Reference

Heo KH, Hwang HJ, Park YH, et al. Effects of pulsed electromagnetic therapy for cervicogenic headaches: Randomised clinical trial. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2007; 17(3): 147–59 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of pulsed electromagnetic therapy for cervicogenic headaches.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Dongkuk University Bundang Oriental Hospital), Republic of Korea.

### 4. Participants

Patients who visited the hospital between 1<sup>st</sup> November 2006 and 5<sup>th</sup> June 2007 with cervicogenic headache, VAS score over 5 (n=34).

### 5. Intervention

Arm 1: Acupuncture + pulsed electromagnetic therapy (n=18).

Arm 2: Acupuncture only (control treatment) (n=16).

Acupuncture was applied to the Wangu (GB12, 完骨), Fengchi (GB 20, 風池), Fengfu (GV 16 風府), Anmian (EX-HN22, 安眠), and Huatuojiaji (EX-B2, 華陀夾脊) acupoints between the 2<sup>nd</sup> and 3<sup>rd</sup> cervical vertebra.

Pulsed electromagnetic therapy (PEMT) was applied after acupuncture of the suboccipital fascia. Digitized electromagnetic 5-Hz and 10-Hz impulses were delivered for 15 minutes with frequency changing every 5 seconds using a CR-3000 (CR Technology, SungNam, Korea) equipped with a high performance microactuator.

### 6. Main Outcome Measures

Pain assessed on a visual analogue scale (VAS).

### 7. Main Results

The site of the headache was related to the severity of the neck injury. The headaches were generally on the left side or both sides and rarely on the right side. Improvement was significant throughout the treatment course in Arm 1 ( $P<0.05$ ) but only after the 3<sup>rd</sup> treatment in Arm 2. The between-group difference in VAS was significant after ( $P<0.05$ ) but not before treatment.

### 8. Conclusions

Pulsed electromagnetic therapy enhances improvement attributable to acupuncture only treatment.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the effect of pulsed electromagnetic therapy on cervicogenic headaches. Pain intensity was more significantly reduced by pulsed electromagnetic therapy combined with acupuncture. The limitation of this study is that the randomization method was not mentioned. But it is clinically meaningful in that this study is a randomized, controlled trial of a headache remedy.

### 11. Abstractor and date

Jang KT, 31 August 2010.

## 6. Nervous System Diseases

### Reference

Lee CU, Park IB, Kim SU, et al. The effect of acupuncture and Dong's acupuncture about Bell's palsy. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2004; 21(2): 287–300 (in Korean with English abstract).

### 1. Objectives

To compare the efficacy of acupuncture with that of Dong's acupuncture as treatment for Bell's palsy.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Oriental Medicine Hospital of Dongeui Universtiy), Republic of Korea.

### 4. Participants

Forty patients diagnosed with Bell's palsy by an otorhinolaryngologist within 7 days of onset. Treatment was initiated within an average of 7 days of hospitalization and lasted 4 weeks.

### 5. Intervention

Once a day during hospitalization, twice a week during the ambulatory period.

Arm 1: Acupuncture treatment group (n=21). Acupuncture points in the affected site include: Jiache (ST6, 頰車), Dicang (ST4, 地倉), Renzhong (GV26, 人中), Chengjiang (CV24, 承漿), Yifeng (TE17, 翳風), Sibai (ST2, 四白), Yangbai (GB14, 陽白), Hegu (LI4, 合谷), Sizhukong (TE23, 絲竹空), Cuanzhu (UB2, 攢竹), Zusanli (ST36, 足三里), and Taichong (LR3, 太沖).

Arm 2: Dong's acupuncture treatment group (n=19). Acupuncture points in the unaffected site include: Samjung Sahwa, a point to one side of Zusanli (ST36, 足三里), and a point beneath of ST36, which are considered to be Dong's acupuncture points.

### 6. Main outcome measures

Yanagihara's unweighted grade (on a 5-point scale).

### 7. Main results

The change in Yanagihara's score from pre- to posttreatment was significantly higher in Dong's acupuncture treatment group than in the acupuncture group, but the difference was statistically insignificant. Yanagihara's score 2–5 weeks after treatment was significantly higher in Dong's acupuncture treatment group ( $20.4 \pm 7.4$  vs.  $19.3 \pm 4.3$  [pretreatment];  $P=0.36$  and  $35.6 \pm 6.6$  vs.  $29.1 \pm 6.2$  [5 weeks post-treatment];  $P=0.001$ ).

### 8. Conclusions

Dong's acupuncture is more effective than acupuncture in the treatment of Bell's palsy.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

The effectiveness of acupuncture was compared with that of Dong's acupuncture. Several effective treatments have been reported for Bell's palsy. This article is the first to compare the efficacies of these treatments for Bell's palsy. Forty-six hospitalized patients were randomly assigned to either the acupuncture group or Dong's acupuncture group. Subjects failing to meet the criteria for inclusion were excluded. The limitations of this study were the small number of subjects and the persistence of sequelae complicating the comparative analysis. Comparative study with long-term follow up (more than 2 months) and a large number of patients is needed.

### 11. Abstractor

Lee EJ, 26 May 2010.

## 6. Nervous System Diseases

### Reference

Lee CW, Kim HG, Heo SW, et al. The clinical study about Hominis placenta herbal acupuncture on Bell's palsy. *Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)* 2005; 8(3): 87–97 (in Korean with English abstract).

### 1. Objectives

To evaluate the efficacy of Hominis placenta herbal acupuncture in the treatment of Bell's palsy.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Oriental Medicine Hospital of Dongeui Universtiy), Republic of Korea.

### 4. Participants

Patients with Ramsey-Hunt syndrome were excluded. Forty-four patients diagnosed with Bell's palsy by a otolaryngologist and treated with Western medicine. The patients received their first medical examination within 7 days of the disease onset, were hospitalized 7–10 days, and then received 4 weeks of ambulatory care.

### 5. Intervention

Injections (0.03 cc) were given 3 times per week during hospitalization and two times per week during ambulatory care. Affected facial acupuncture points included: Yangbai (GB14, 陽白), Quanliao (SI18, 顴髎), Dicang (ST4, 地倉), Jiache (ST6, 頰車), Yifeng (TE17, 翳風), and Sizhukong (TE23, 絲竹空).

Arm 1: Hominis placenta herbal acupuncture treatment group (n=23).

Arm 2: Saline acupuncture treatment group (n=21).

### 6. Main outcome measures

Yanagihara's unweighted grade.

### 7. Main results

1) Yanagihara's unweighted grade increased between pre-treatment and 3 weeks after treatment, but the increase was nonsignificantly greater in Arm 1 than in Arm 2. The difference (which was not significant before treatment;  $17.4 \pm 4.1$  [Arm 1] vs.  $16.4 \pm 3.97$  [Arm 2];  $P=0.532$ ) but became significant 5 weeks after treatment ( $33.7 \pm 5.7$  [Arm 1] vs.  $28.7 \pm 7.5$  [Arm 2];  $P=0.032$ ).

2) The most frequently occurring symptom was stress-induced hypertension, and the initial symptom was postauricular pain.

### 8. Conclusions

The efficacy of hominis placenta Herbal acupuncture is greater in late treatment period than in early treatment period. In the early treatment period, most of the efficacy is attributable to Geo pung tong gi (祛風通氣, expelling wind and promoting the circulation of Ki). It is thought that hominis placenta Herbal acupuncture is more effective in older patients, patients with wasting diseases, and in cases where the treatment course is slow.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This article examined the efficacy of hominis placenta herbal acupuncture in the treatment of Bell's palsy. Compared to previous papers, this article was more objective, using saline as a placebo. The limitations of the study are the small number of patients and short follow-up period, which was too short (5 weeks) to demonstrate complete recovery. A new trial with more patients and follow-up longer than 2 months is needed. Moreover, the use of Western treatment and physical therapy simultaneously complicates the interpretation of these hominis placenta herbal acupuncture findings.

### 11. Abstractor

Lee EJ, 26 May 2010.

## 6. Nervous System Diseases

### Reference

Kim MS, Kim HJ, Park YJ, et al. The clinical research of the efficacy of bee venom aqua-acupuncture on peripheral facial paralysis. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2004; 21(4): 251–62 (in Korean with English abstract).

### 1. Objectives

To determine the clinical efficacy of bee venom aqua-acupuncture for the treatment of peripheral facial paralysis.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Semyung University Oriental Medicine Hospital), Republic of Korea.

### 4. Participants

Thirty patients who visited the hospital where peripheral facial paralysis was diagnosed by physical examination.

### 5. Intervention

Bee venom aqua-acupuncture (0.03 cc injected per acupuncture point on an average of twice a week) at facial acupuncture points at the affected site including Yangbai (GB14, 陽白), Quanliao (SI18, 顴髎), Dicang (ST4, 地倉), Jiache (ST6, 頰車), and Yifeng (TE17, 翳風).

Arm 1: General traditional Korean medicine treatment only group (n=15).

Arm 2: General traditional Korean medicine treatment plus bee venom aqua-acupuncture treatment (more than 6 times) group (n=15).

### 6. Main outcome measures

Yanagihara's unweighted grade. Change in paralysis score from pre- to posttreatment, used as an improvement index.

Improvement Index (%) = (Score before treatment – Score after treatment)/Score after treatment\*100.

### 7. Main results

1) Yanagihara's unweighted grade was higher 1–2 weeks after treatment in Arm 2 and higher 3–4 weeks after treatment in Arm 1, but the difference before treatment ( $9.93 \pm 8.42$  [Arm 1] vs.  $15.9 \pm 9.21$  [Arm 2];  $P=0.067$ ) and 4 weeks after treatment ( $35.7 \pm 5.2$  [Arm 1] vs.  $32.4 \pm 7.2$  [Arm 2];  $P=0.185$ ) was insignificant.

2) Improvement index was higher in Arm 1 than Arm 2 1–4 weeks after treatment. At 3–4 weeks, the index was significantly higher in Arm 1 ( $71.5 \pm 24.1$  vs.  $51.2 \pm 28.3$  [at 4 weeks];  $P=0.044$ ).

### 8. Conclusions

Addition of bee venom aqua-acupuncture to general traditional Korean Medicine treatment improves the outcomes of patients with peripheral facial paralysis.

### 9. Safety assessment in the article

Side effects such as local pain, swelling, and itching after the bee venom aqua-acupuncture were exhibited by some patients (who withdrew from treatment). These are described in the discussion section of the original article.

### 10. Abstractor's comments

This article describes the efficacy of bee venom aqua-acupuncture in the treatment of peripheral facial paralysis. This is the first study to compare bee venom aqua-acupuncture with conventional general traditional Korean medicine. Thirty patients were selected and randomized into two groups, and one group was treated with six rounds of bee venom aqua-acupuncture. The severity of facial muscle paralysis was evaluated using the Yanagihara's unweighted grading system. The improvement index calculated from Yanagihara's unweighted grades was compared between the two groups. Bee venom aqua-acupuncture enhanced the efficacy of general traditional Korean medicine. The number of subjects was small. As the follow up period was limited to 4 weeks, the required time for recovery could not be calculated.

### 11. Abstractor

Lee EJ, 26 May 2010.

## 6. Nervous System Diseases

### Reference

Kwon NH, Shin YJ, Kim CY, et al. Comparative clinical study between Oriental medical and Oriental-Western medical treatment on Bell's palsy. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2008; 25(3): 19–28 (in Korean with English abstract).

### 1. Objectives

To compare the effectiveness of Bell's palsy treatment with Oriental medicines only to that of combined treatment with Oriental and Western medicines.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Hospital at Gangdong), Republic of Korea.

### 4. Participants

Thirty patients with Bell's palsy diagnosed by an otolaryngologist.

### 5. Intervention

Arm 1: Oriental medical treatments (acupuncture, herbal medicine, physiotherapy) only (n=15).

Arm 2: Oriental and Western medical treatments (acupuncture, herbal medicine, physiotherapy + [steroids]) combined (n=15).

### 6. Main outcome measures

House-Brackmann grade (H-B grade).

### 7. Main results

1) Treatment significantly improved outcome (H-B grade) during the interval between pre-treatment and 4 weeks after treatment in both arms ( $P=0.000$ ).

2) The improvement in H-B grade was greater in Arm 1 than in Arm 2 after 1 week, similar in both arms after 2 weeks, and greater in Arm 2 than in Arm 1 after 3 and 4 weeks. There was no statistical significant between-arm difference in outcome after 4 weeks ( $1.73 \pm 0.88$  [Arm 1] vs.  $1.93 \pm 0.80$  [Arm 2];  $P=0.436$ ).

### 8. Conclusions

Oriental-Western medical co-treatment compared to Oriental medical treatment only has greater impact on long-term treatment outcome, but the between-treatment difference is without statistical significance.

### 9. Safety assessment in the article

Not mentioned

### 10. Abstractor's comments

This study compares the effectiveness of Oriental medical treatment with Oriental-Western medical co-treatment for Bell's palsy. Recently, many Oriental-Western medical co-treatments have been tried, prompting a comparison of their effectiveness. In previous studies (Kang MJ. A clinical study comparing Oriental medicine with Oriental-Western medicine treatment for facial nerve paralysis, *Daehan-Chimgu-Hakhoeji [Journal of Korean Acupuncture & Moxibustion Society]* 2000; 17(1): 55–66; Kim NH. A clinical study comparing Oriental medicine with Oriental-Western medicine treatment for Bell's palsy. *Journal of Korean Acupuncture & Moxibustion Society* 2001; 18(5): 99–108), it was reported that the Oriental medical treatment only was more effective than Oriental-Western co-treatment in improving outcome. This result is in contrast with the results of this study, but the treatment period was three weeks in the previous study and four weeks in this study. Although the present study concluded that Oriental-Western co-treatment had a better therapeutic effect, four weeks is too short to determine the therapeutic effect on Bell's palsy, and more than two months of follow up are needed to determine the final recovery rate and presence of sequelae. To determine treatment effect, incomplete paralysis needs to be differentiated from complete paralysis more precisely. Since improvement may depend on the periodicity of steroid cycles, a comparative study that takes this factor into account is needed.

### 11. Abstractor

Lee EJ, 26 May 2010.

## 6. Nervous System Diseases

### Reference

Lim JA, Kim SC, Kim SN, et al. Treatment of carpal tunnel syndrome using Scolopendrid herbal acupuncture. *Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)* 2005; 8(1): 13–20 (in Korean with English abstract).

### 1. Objectives

To evaluate the efficacy of Scolopendrid herbal acupuncture in the treatment of carpal tunnel syndrome.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Oriental Medical hospital at Gwangju, Wonkwang University), Republic of Korea.

### 4. Participants

Forty patients who visited the hospital with hand pain or tingling, and night pain. All were positive for Tinel's and Phalen's signs. (The subjects were allowed to receive treatment from another hospital in addition to the trial treatment.)

### 5. Intervention

Arm 1: Traditional Korean medicine treatment (drugs, electro-acupuncture, acupuncture, physiotherapy) group (n=20).

Arm 2: Traditional Korean medicine treatment plus Scolopendrid herbal acupuncture treatment group (n=20).

### 6. Main outcome measures

Patient satisfaction rated on a visual analogue scale.

Excellent: Nearly normal recovery both subjectively and objectively. Over 70% improvement.

Good: Improvement in everyday life, with slight impairment of physical activity and discomfort remaining at the affected site. About 50–70% improvement.

Fair: Symptoms not significantly improved. Physical activity impaired and strenuous exercise impossible to do. Less than 50% improvement.

Poor: No improvement or worsening of the symptoms. Less than 20% improvement.

### 7. Main results

1) The improvement in the symptoms of carpal tunnel syndrome was greater in Arm 2 (95% improvement) than in Arm 1 (75% improvement).

2) In patients with thenar muscle atrophy requiring surgery, pain disappeared completely after combined treatment.

3) The efficacy of treatment for carpal tunnel syndrome was greater in Arm 2 (excellent 9 [45%] vs. 6 [30%], good 10 [50%] vs. 9 [45%], fair 1 [5%] vs. 4 [20%], poor 0 [0%] vs. 1 [5%]).

### 8. Conclusions

Treatment efficacy for carpal tunnel syndrome is significantly improved by combined treatment.

### 9. Safety assessment in the article

Not evaluated. The directions for Scolopendrid herbal acupuncture needle insertion are mentioned.

### 10. Abstractor's comments

This report is the first to evaluate the efficacy of Scolopendrid herbal acupuncture for treatment of carpal tunnel syndrome. Among the outpatients who visited to the hospital with hand pain or tingling, and night pain, forty patients with Tinel's and Phalen's signs were enrolled and were allowed treatment from another hospital in addition to the trial treatment. The limitation of this study was that the trial was not long enough to permit sufficient evaluation. Carpal tunnel syndrome recurs readily with overuse of the wrist. Follow up of 1–6 months is needed for sufficient evaluation. (There was no statistical analysis of the efficacy of treatment, and the treatment periods and frequency were not mentioned. The effect of other treatments could dilute the effects of the trial treatments.)

### 11. Abstractor

Lee EJ, 26 May 2010.

## 7. Eye Diseases

### Reference

Kim MB, Kim KK, Hong SH, et al. The clinical tests for treatment improvement comparison in Myopia between eye acupuncture massage machine (NURIEYE-1) and acupuncture. *Daehan-Hanbang-AnIbiinhupibugwa-Hakhoeji (Journal of Korean Oriental Medical Ophthalmology Otolaryngology Dermatology)* 2009; 22(3): 80–94 (in Korean with English abstract).

### 1. Objectives

To compare the efficacy of the eye acupuncture point massage with that of acupuncture in the treatment of myopic eyes.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Oriental Medicine Hospital of Dongeui Universtiy), Republic of Korea.

### 4. Participants

Thirty-two patients (age, more than 7 years) with the low-level myopia under -3 diopters and pseudo-myopia.

### 5. Intervention

Acupuncture was applied at the following acupuncture points: Zanzhu (UB2, 攢竹), Yangbai (GB14, 陽白), Sizhukong (TE23, 絲竹空), Tongziliao (GB1, 瞳子髎), Chengqi (ST1, 承泣), Hegu (LI4, 合谷), and Guangming (GB37, 光明). Eye acupuncture point massage was applied to the areas surrounding the eye.

Arm 1: Self-massage group (n=16). Eye massage using an eye acupuncture point massage machine, twice a day for 15 minutes over an 8-week period.

Arm 2: Acupuncture treatment group (n=16). Twice a week for 8 weeks.

One subject dropped out.

### 6. Main outcome measures

Visual acuity score, score on the McGill Quality of Life (MQOL) Questionnaire for Myopia, and skin temperature around eye area measured by Digital Infrared Thermal Imaging (DITI).

### 7. Main results

There was no significant between-group difference in average visual acuity, MQOL, and DITI scores before and after treatment, but both treatments significantly improved visual acuity, MQOL, and DITI scores.

### 8. Conclusions

The effectiveness of self massage using the eye acupuncture point massage machine and that of acupuncture treatment are similar.

### 9. Safety assessment in the article

One child dropped out because of dizziness due to vibration during the massage.

### 10. Abstractor's comments

In traditional Korean medicine, myopia (eyes lose their luster) is thought to be caused by insufficient heart-yang (心陽) and by damage to Ki-blood (氣血) from too much reading.

It was understood prior to the start of this study that acupuncture is effective for myopia. This clinical trial evaluated whether the eye acupuncture point massage machine could replace acupuncture treatment for myopia. Though the efficacies of the acupuncture point massage machine and acupuncture were similar, it was concluded that use of this machine for myopia treatment was more efficient inasmuch as it was less time-consuming than acupuncture treatment.

### 11. Abstractor

Nam HJ, 10 June 2010.

## 9. Cardiovascular Diseases

### Reference

Yin CS, Seo BK, Park HJ, et al. Acupuncture, a promising adjunctive therapy for essential hypertension: a double-blind, randomized, controlled trial. *Neurological Research* 2007; 29(suppl 1): s98–103.

### 1. Objectives

To assess the efficacy of acupuncture as an adjunctive treatment for hypertension.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Patients with hypertension or prehypertension (systolic blood pressure, 120 mmHg; diastolic blood pressure, over 80 mmHg; n=41).

### 5. Intervention

Arm 1: Acupuncture administered to: 1) Zusanli (ST36, 足三里) Quchi (LI11, 曲池) Dachangshu (BL25, 大腸俞); 2) Taibai (SP3, 太白), Taiyuan (LU9, 太淵) Feishu (BL13, 肺俞); 3) Shangqu (KI17, 商曲), Dahe (KI12, 大赫) Guanyuan (CV4, 關元); 4) Shangyang (LI1, 商陽), Dazhui (GV14, 大椎), Fengchi (GB20, 風池) acupuncture points (n=21).

Arm 2: Park's sham acupuncture administered (n=20).

Seventeen treatments during eight weeks.

Eleven patients dropped out (6 in Arm 1; 5 in Arm 2).

### 6. Main outcome measures

Blood pressure measurement after 4 weeks and 8 weeks of treatment.

### 7. Main results

Although 8 weeks of treatment produced no significant between-group differences in blood pressure, blood pressure was significantly decreased from 136.8/83.7 to 122.1/76.8 after 8 weeks of treatment in Arm 1 ( $P < 0.001$ ).

### 8. Conclusions

Acupuncture has an antihypertensive effect.

### 9. Safety assessment in the article

Spot-bleeding occurred in 5% of the subjects in Arm 1.

### 10. Abstractor's comments

Sa-am acupuncture principles (a distinctive feature of the Korean Oriental medicine) was used to select the acupuncture points. Treatment for 8 weeks significantly decreased blood pressure. Additional study and a large scale clinical trial are needed.

### 11. Abstractor

Go HY, 18 July 2010.



## 9. Cardiovascular Diseases

### Reference

Bae HS, Shin AS, Park SU, et al. Effects of acupuncture at ST36 on blood pressure and endothelial dependent vasodilation in hypertensive patients. *Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)* 2008; 29(3): 657–65 (in Korean with English abstract).

### 1. Objectives

To assess the effects of acupuncture at the Zusanli (ST 36, 足三里) acupuncture point on blood pressure and endothelial dependent vasodilation.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Hospital at Gangdong), Republic of Korea.

### 4. Participants

Twenty-four male and female patients (age, 18–70 years) who were diagnosed as having essential hypertension and receiving antihypertensive treatment.

### 5. Intervention

Arm 1: Acupuncture treatment at the Zusanli (ST36, 足三里) acupuncture point (n=12).

Arm 2: Sham acupuncture treatment group (n=12).

### 6. Main outcome measures

% Flow-mediated dilation (FMD), hemodynamometry.

### 7. Main results

There was no significant between-group difference in blood pressure. FMD increased significantly from  $9.5 \pm 2.0\%$  to  $11.1 \pm 2.2\%$  after acupuncture at the Zusanli (ST36, 足三里) acupuncture point, but remained unchanged ( $9.2 \pm 2.9\%$  to  $9.8 \pm 2.3$ ;  $P = 0.091$ ) after control treatment.

### 8. Conclusions

Acupuncture at the Zusanli (ST36, 足三里) acupuncture point may improve endothelial cell dysfunction.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

Previous studies have suggested that acupuncture or moxibustion at the Zusanli acupuncture point is antihypertensive. Blood pressure was not changed by acupuncture treatment at the Zusanli. Thus, the subjects of the study took antihypertensive medication and their average blood pressures were low ( $132.6 \pm 13.6$  mmHg in treatment group and  $129.2 \pm 17.1$  mmHg in control group). However, this study found that acupuncture at the Zusanli acupuncture point significantly increased the FMD and improved endothelial cell dysfunction. An additional study with more cases and hospitals are needed.

### 11. Abstractor

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Kim BS, Jang IS, Yeo JJ, et al. Effect of Choksamni (足三里, ST36) moxibustion on blood pressure elevation in hypertensive patients: A randomized controlled trial. *Daehan-Hanui-Hakhoeji (Journal of Korean Oriental Medical Society)* 2005; 26(3): 66–73 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of Zusanli (ST 36, 足三里) moxibustion on blood pressure elevation in hypertensive patients.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One oriental hospital (Oriental Medical Hospital at Jeonju, Woosuk University), Republic of Korea.

### 4. Participants

Patients with abrupt systolic blood pressure elevation over 160 mmHg (n=61).

### 5. Intervention

Arm 1: Zusanli (ST 36, 足三里) moxibustion treatment (n=30).

Arm 2: Bed rest only (n=31).

### 6. Main outcome measures

Blood pressure measured at four times (30, 60, 90, and 120 minutes) after the intervention.

### 7. Main results

1) The systolic bloodpressure in Arm 1, relative to Arm 2, showed significant decrease at 60, 90, and 120 minutes ( $P$ : <0.01, <0.001, and <0.001, respectively). Although the decrease in systolic blood pressure at 30 minutes was greater in Arm 2 than in Arm 1 ( $-10.0\pm 8.56$  mmHg vs.  $-8.33\pm 8.34$  mmHg), the between-group difference was not significant.

2) The diastolic blood pressure in Arm 1 (relative to Arm 2) was significantly decreased at 120 minutes ( $P$ <0.05).

### 8. Conclusions

Zusanli moxibustion treatment can significantly reduce blood pressure elevation.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

The focus of many previous studies on Zusanli acupuncture point was its effects on the early symptoms of apoplexy, control of pain, and gastrointestinal diseases, but not its circulatory effects including a blood pressure lowering effect without change in heart beat. This study is on the lowering of abrupt blood pressure elevation by moxibustion on-Zusanli acupuncture point. The decrease in blood pressure as well as the relief of headache, vertigo, and nausea persisted at least 2 hours. But as the observation period was short and number of subjects were small, there is a need for additional studies.

### 11. Abstractor

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Lee CR, Lee SH, Rhee JW, et al. The effect of Korean, Chinese and American ginseng on blood pressure of hypertensive patients. *Daehan-Hanui-Hakhoeji (Journal of Korean Oriental Medical Society)* 2005; 26(3): 228–38 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of ginseng on the blood pressure in hypertensive patients.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Subjects with prehypertension and stage 1 hypertension diagnosed using 24-hour ambulatory blood pressure monitoring (n=123).

### 5. Intervention

Arm 1: Korean ginseng treatment (n=22).

Arm 2: Chinese ginseng treatment (n=25).

Arm 3: American ginseng treatment (n=24).

Arm 4: Korean red ginseng treatment (n=25).

Ginseng was administered in capsules, and the treatment was for 4 weeks, 3 times a day, 4 capsules per dose.

Twenty seven subjects dropped out during the study.

### 6. Main outcome measures

Ambulatory blood pressure measured over a 24-hour period.

Symptoms related to the hypertension (headache, nuchal pain, and hot flush) assessed on a visual analogue scale.

### 7. Main results

- 1) Treatment significantly decreased systolic blood pressure in Arm 2 ( $P<0.05$ ) and diastolic blood pressure in Arm 1 ( $P<0.05$ ), but there were no between-group differences in pre- to post-treatment change in blood pressure.
- 2) Blood pressure variability and average real variability in diastolic blood pressure decreased significantly in Arm 2.
- 3) The above symptoms related to hypertension decreased significantly in all subjects ( $P$  for headache or hot flush, headache, and hot flush:  $<0.001$ ,  $<0.001$ ,  $0.043$ , respectively), especially in Arm 1.

### 8. Conclusions

All the ginsengs significantly decrease blood pressure and hypertension-related symptoms, but no ginseng is more effective than the others.

### 9. Safety assessment in the article

There were no abnormal laboratory findings (liver and renal function tests) and no adverse effects of treatment.

### 10. Abstractor's comments

Ginseng is thought to increase metabolic rate, but symptoms such as headache, nuchal pain, and hot flush were significantly decreased in this study. Treatment decreased blood pressure regardless of the kind of ginseng, and there were no significant between-group differences. The hypertension was not 'cured' in the short term, so that additional analysis and further large-scale clinical trials will be needed.

### 11. Abstractor

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Chung KH, Roh JH, Kim LD, et al. The effects of Samhwangsasim-tang extracts on ambulatory blood pressure in mild hypertensive patients with stroke. *Daehan-Hanbang-Seonginbyeong-Hakhoeji (Journal of Korean Oriental Chronic Disease)* 2002; 8(1): 41–52 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of Sam-Hwang-Sa-Sim-Tang (三黄瀉心湯) on mild hypertension.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Hospitalized patients with mild hypertension (systolic blood pressure, 140~149 mmHg, or diastolic blood pressure, 90~99 mmHg: n=37).

### 5. Intervention

Arm 1: Conventional Korean Oriental medicine + Sam-Hwang-Sa-Sim-Tang (三黄瀉心湯) treatment (n=19).

Arm 2: Conventional Korean Oriental medicine only (n=18).

### 6. Main outcome measures

Blood pressure as measured by 24-h ambulatory blood pressure monitoring.

### 7. Main results

The change in blood pressure a week after treatment in Arm 1 and Arm 2 was –10.4 mmHg and 3.72 mmHg, respectively ( $P<0.05$ ). The change in blood pressure after 2 weeks of treatment in Arm 1 and Arm 2 was –16.0 mmHg and –3.83 mmHg, respectively ( $P<0.05$ ). Systolic blood pressure was significantly more decreased in Arm 1 after 1 and 2 weeks than in Arm 2, but there were no between-group differences in diastolic blood pressure.

### 8. Conclusions

Sam-Hwang-Sa-Sim-Tang treatment has efficacy in the treatment of mild hypertension.

### 9. Safety assessment in the article

The levels of aspartate aminotransferase (AST), alanine aminotransferase (ALT), blood urea nitrogen (BUN), creatinine, and electrolytes were within the normal range. One subject in the Sam-Hwang-Sa-Sim-Tang treatment group complained of mild abdominal pain, but there was no clear association with treatment.

### 10. Abstractor's comments

The Sam-Hwang-Sa-Sim-Tang obtained from *Jinguiyaolue* (金匱要略, *the Synopsis of prescriptions of the Golden Chamber*) was previously shown to have antihypertensive, anti-hypercholesterolemic, and antioxidative effects. Before prescribing a new drug or increasing the dose of an already prescribed Western drug for mild hypertension in stroke patients, Sam-Hwang-Sa-Sim-Tang should be tried. But insofar as only 37 cases were included in this trial, an additional clinical trial is needed.

### 11. Abstractor

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Yun SP, Jung WS, Park SU, et al. Anti-hypertensive effect of Chunghyul-dan (Qingxue-dan) on stroke patients with essential hypertension. *American Journal of Chinese Medicine* 2005; 33(3): 357–64.

### 1. Objectives

To evaluate the anti-hypertensive effect of Chunghyul-dan (Qingxue-dan, 清血丹) on stroke patients with essential hypertension.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

The patients with stage 1 hypertension (classified by JNC 7 hypertension guidelines) at 10 days after onset (n=40).

### 5. Intervention

Arm 1: Conservative therapy + 1200 mg of Chunghyul-dan (Qingxue-dan, 清血丹) treatment for 14 days (n=22).

Arm 2: Conservative therapy only (n=18).

Twelve subjects dropped out during the study (7 in Arm 1, 5 in Arm 2).

### 6. Main outcome measures

Blood pressure measurement.

### 7. Main results

Systolic blood pressure ( $141.4 \pm 8.96$  mmHg  $\rightarrow$   $132.9 \pm 9.46$  mmHg) was significantly decreased by treatment in Arm 1 compared to that in Arm 2 ( $P=0.03$ ). But there was no significant between-group differences in diastolic blood pressure and pulse rate.

### 8. Conclusions

Chunghyul-dan treatment appears to be effective for stage 1 hypertension in patients with stroke.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

Chunghyul-dan treatment was effective for stage 1 hypertension in patients with stroke and had no particular adverse effect, so its use can be recommended. But inasmuch as 30% of subjects dropped out, and no control drug was used, a large scale and long term follow-up study is needed.

### 11. Abstractor

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Lee SH, Kim EJ, Kim LD, et al. The effect of intradermal acupuncture on the patients with the insomnia after stroke. *Daehan-Hanbang-Naegwa-Hakhojei (Korean Journal of Oriental Internal Medicine)* 2004; 25(1): 136–46 (in Korean with English abstract).

### 1. Objectives

To evaluate the efficacy of intradermal acupuncture for insomnia after stroke.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

KyungHee Oriental Hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

The patients were hospitalized between November 2002 to July 2003, diagnosed as having cerebral infarction and cerebral hemorrhage, and insomnia reflected by an Insomnia Severity Index (ISI) >15 for 3 consecutive days (n=30).

### 5. Intervention

Arm 1: Intradermal acupuncture treatment at the Shenmen (HT7, 神門) and Neiguan (PC6, 內關) acupoints (n=15).

Arm 2: Control group. Needle attached but not inserted at the Shenmen (HT7, 神門) and Neiguan (PC6, 內關) acupuncture points (n=15).

Two subjects dropped out during the study.

### 6. Main outcome measures

Score on Morning Questionnaire (MQ), ISI, and Athens Insomnia Scale (AIS).

### 7. Main results

- 1) ISI and AIS scores on total sleep time, sleep quality, condition on waking, ability to concentrate, and sleepiness in the morning were significantly improved in Arm 1 compared to Arm 2.
- 2) In treatment group, non-responders complained of nausea, halitosis, belching, and acid regurgitation, and abundant expectoration, while responders complained of palpitation, oppressive feeling in the chest, and somniphobia (fear of sleep).

### 8. Conclusions

The intradermal acupuncture treatment at the Shenmen and Neiguan acupuncture points can be used to treat insomnia in patients with stroke.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated intradermal acupuncture treatment at the Shenmen (HT7, 神門) and Neiguan (PC6, 內關) acupuncture points for insomnia in 30 patients after stroke who were diagnosed as having cerebral infarction, cerebral hemorrhage, and insomnia (ISI over 15) for 3 consecutive days. In conclusion, total sleep time, sleep quality, etc. were significantly improved in Arm 1 compared with Arm 2. The results suggest that this treatment can be used for insomnia after stroke.

### 11. Abstractor

Cho SH, 13 July 2010.

## 9. Cardiovascular Diseases

### Reference

Lee SY, Baek YH, Park SU, et al. Intradermal acupuncture on Shen-Men and Nei-Kuan acupoints improves insomnia in stroke patients by reducing the sympathetic nervous activity: a randomized clinical trial. *American Journal of Chinese Medicine* 2009; 37(6): 1013–21.

### 1. Objectives

To evaluate the effectiveness of the intradermal acupuncture at the Shenmen (HT7, 神門) and Neiguan (PC6, 內關) acupuncture points for insomnia.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

KyungHee Oriental Hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Patients were hospitalized between November 2007 and August 2008, diagnosed as having cerebral infarction and cerebral hemorrhage, and insomnia reflected by Insomnia Severity Index (ISI) >15 for 3 consecutive days (n=52).

### 5. Intervention

Arm 1: Intradermal acupuncture treatment at the Shenmen (HT7, 神門) and Neiguan (PC6, 內關) acupuncture points (n=27).

Arm 2: Control group. Acupuncture needle attached but not inserted at the Shenmen (HT7, 神門) and Neiguan (PC6, 內關) acupuncture points (n=25).

### 6. Main outcome measures

Score on ISI, Athens Insomnia Scale (AIS).

### 7. Main results

ISI and AIS scores were significantly increased in Arm 1 compared to Arm 2. In addition, night hypertension and heart rate variability (LF/HF ratio) were significantly decreased.

### 8. Conclusions

The sympathetic nerve activity was stabilized in Arm 1. Therefore, intradermal acupuncture treatment at the Shenmen and Neiguan acupuncture points is effective for insomnia after stroke.

### 9. Safety assessment in the article

The blood pressure and heart rate variability were checked.

### 10. Abstractor's comments

This study examined the effectiveness of intradermal acupuncture for insomnia after stroke. Fifty-two patients previously diagnosed as having cerebral infarction and cerebral hemorrhage, and insomnia (ISI >15) for 3 consecutive days were allocated to Arm 1 or Arm 2. Treatment decreased night hypertension and heart rate variability but increased ISI and AIS scores, suggesting that it can be used for insomnia after stroke.

### 11. Abstractor

Cho SH, 13 July 2010.

## 9. Cardiovascular Diseases

### Reference

Kim JY, Jung SM, Park CK, et al. The clinical effectiveness of acupuncture at Palsa (BaXie) for hand function in hemiparetic patients after stroke. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2008; 25(2): 97–104 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of acupuncture at the Palsa (EX-UE9, 八邪) acupuncture point for hand function recovery in hemiparetic patients after stroke.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Jungwha Korean Medical Hospital), Republic of Korea.

### 4. Participants

Stroke patients with hemiparesis more than 8 days from onset (n=62).

### 5. Intervention

Arm 1: Conservative therapy + acupuncture at the Palsa (EX-UE9, 八邪) acupuncture point (given twice a day for 9 days, 15 minutes per round, 19 rounds in total; n=31).

Arm 2: Conservative therapy only (n=31).

### 6. Main outcome measures

Change in strength of carpal joint muscles, Fugl-Meyer motor scale, and Motricity Index.

### 7. Main results

- 1) There were no significant between-group differences in strength change of the carpal joint muscles.
- 2) There was significant between-group differences in the change in grasping power ( $6.45 \pm 3.71$  in Arm 1 vs.  $4.58 \pm 2.91$  in Arm 2,  $P=0.046$ ).
- 3) There was no significant between-group difference in Motricity Index.
- 4) There was significant improvement in Fugl-Meyer motor scale score in Arm 1 ( $4.61 \pm 1.65$  vs.  $3.58 \pm 1.91$  in Arm 2,  $P=0.004$ ).

### 8. Conclusions

Acupuncture at Baxie acupuncture point is effective for recovering grasping power and hand function in hemiparetic patients after stroke.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the effectiveness of acupuncture at the Baxie acupuncture point for hand function recovery. Stimulation of the Palsa acupuncture point strongly balances Ki and blood (氣血) flow, removes obstruction in meridians and collaterals (通經活絡), and alleviates pain (止痛). Thus, it is frequently used for treating arthralgia syndrome or blockage syndrome. Although improvements in grasping power and hand function after acupuncture treatment at the Baxie acupuncture point were observed, the study had no sham acupuncture control group, only a small number of patients, and a short observation period, suggesting the need for additional clinical trials.

### 11. Abstractor

Go HY, 18 July 2010.



## 9. Cardiovascular Diseases

### Reference

Kim MB, Shin HD, Kim SS. The influence of electroacupuncture interosseous muscle for hand function in hemiplegic patients after stroke. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2005; 15(4): 17–28 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of electroacupuncture for hand function recovery in hemiplegic patients after stroke.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Patients with stroke onset of more than 4 weeks and muscle strength with Medical Research Council (MRC) score of less than 4 (n=10).

### 5. Intervention

Arm 1: Conservative therapy + electroacupuncture treatment (6 rounds per week, 20 minutes per round, 2 Hz electroacupuncture at the Hegu (LI 4, 合谷), Zhongzhu (TE3, 中渚), and Palsa (EX-UE9, 八邪) acupuncture points (n=5).

Arm 2: Conservative therapy only (n=5).

### 6. Main outcome measures

Measurement of strength of the carpal joint muscles using MRC score.

Scores on the Jebsen-Taylor Hand function test, Action Research Arm test, and modified Barthel Index. Grasping power measured using a squeeze bulb dynamometer.

### 7. Main results

1) The muscle strength at the carpal joint was significantly improved in Arm 1 compared to Arm 2 ( $P=0.016$ ).

2) There was a significant increase in grasping power and in score on the Action Research Arm test in Arm 1 compared to Arm 2 ( $P=0.032$ ) but no significant between-group difference in score on the Jebsen-Taylor hand function test ( $P=0.310$ ).

3) There was no significant between-group difference in daily life (assessed by modified Barthel Index).

### 8. Conclusions

Electroacupuncture is effective for recovering muscle strength at the carpal joint, grasping power, and hand function.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluates the effectiveness of electroacupuncture for impaired hand function due to stroke. Muscle strength at the carpal joint, grasping power, and hand function recovery were observed in response to treatment. However, the study had limitations such as small patient numbers and short study period, suggesting the need for additional clinical trials.

### 11. Abstractor

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Ryu HJ, Kim SS. Effect of electroacupuncture by different insertion method on upper limb function in post stroke patients with hemiplegia. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2006; 16(1): 49–61 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of electroacupuncture on upper extremity function in hemiplegic patients after stroke.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Stroke patients with hemiplegia more than 2 weeks after onset and stable vital signs (n=28).

### 5. Intervention

Electroacupuncture was administered for 20 minutes per round, 6 rounds per week for 4 weeks.

Arm 1: Conservative therapy + electroacupuncture applied to the Quchi (LI11, 曲池)- Shousanli (LI10, 手三里) and Jianyu (LI15, 肩髃)- Naoshu (SI10, 臑兪) acupuncture points, with oblique insertion 3 cm deep (not into the muscle) (n=13).

Arm 2: Conservative therapy + electroacupuncture applied to the Quchi (LI11, 曲池)- Shousanli (LI10, 手三里) and Jianyu (LI15, 肩髃)- Naoshu (SI10, 臑兪) acupuncture points with vertical insertion 3 cm deep (into the muscle) (n=15).

### 6. Main outcome measures

Upper extremity muscle strength evaluation, Fugl-Meyer score, and Modified Barthel Index (MBI).

### 7. Main results

- 1) There was no between-group difference in muscle strength at the shoulder and elbow joints before and after treatment, but there was a tendency toward increased strength in Arm 1.
- 2) Fugl-Meyer score was significantly higher in Arm 1 than in Arm 2 ( $P=0.043$ ).
- 3) The between-group difference in MBI was not significant.

### 8. Conclusions

Electroacupuncture may help restore upper extremity function in hemiplegic patients after stroke. Oblique acupuncture (stimulation of the fascia) is more effective than vertical acupuncture (stimulation of the muscle).

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study compared the effectiveness of oblique electroacupuncture with vertical electroacupuncture (two variations of the method differing only in needle insertion orientation). Additional studies with more patients and for longer periods are needed.

### 11. Abstractor and date

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Kim YS, Hong JW, Na BJ, et al. The effect of low vs. high frequency electrical acupuncture point stimulation on motor recovery after ischemic stroke by motor evoked potentials study. *American Journal of Chinese Medicine* 2008; 36(1): 45–54.

### 1. Objectives

To evaluate the effect of high and low frequency electroacupuncture on dyspraxia in hemiplegic patients after stroke.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Patients with cerebral infarction and hemiplegia, hospitalized from 1 week to 1 month after onset (n=62).

### 5. Intervention

Electroacupuncture applied to the Hegu (LI4, 合谷), Quchi (LI11, 曲池), Shousanli (LI10, 手三里), Waiguan (TE5, 外關), Zusanli (ST36, 足三里), Shangjuxu (ST37, 上巨虛), Xuanzhong (GB39, 懸鐘), and Taichong (LR3, 太冲) acupuncture points.

Arm 1: Conservative therapy + 2 Hz electroacupuncture at the above acupuncture points (n=32).

Arm 2 : Conservative therapy + 120 Hz electroacupuncture at the above acupuncture points (n=30).

### 6. Main outcome measures

Motor evoked potentials (MEP), National Institutes of Health Stroke Scale (NIHSS), Modified Barthel Index (MBI), and Modified Motor Assessment Scale (MMAS).

### 7. Main results

There was significantly more improvement in Arm 1 in latency, central motor conduction time (CMCT), and amplitude ( $P=0.008$ ,  $0.002$ , and  $0.002$ , respectively), but not in NIHSS, MBI, and MMAS. There was more improvement in Arm 2 than Arm 1 in NIHSS, MBI, and MMAS, but the between-group difference was without significance.

### 8. Conclusions

Low frequency electroacupuncture is more effective than high frequency electroacupuncture for dyspraxia after stroke.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

High frequency electroacupuncture acts on the circulation, and low frequency electroacupuncture acts on the sympathetic nervous system. In this study, the difference in therapeutic effects between high and low frequency electroacupuncture suggest that the latter acts on the central nervous system. However, as the treatment period was short, a large scale study is needed.

### 11. Abstractor and date

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Lee SW, Yoon JM, Son JW, et al. The effect of electroacupuncture on upper-extremity spasticity of stroke patients. *Daehan-Hanbang-Naegwa-Hakhoeji (Journal of Korean Oriental Internal Medicine)* 2007; 28(3): 492–501 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of treatment with electroacupuncture on upper-extremity spasticity in stroke patients.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (details not mentioned), Republic of Korea.

### 4. Participants

Hemiplegic patients with upper-extremity spasticity after stroke (n=20).

### 5. Intervention

Arm 1: Conservative therapy + electroacupuncture treatment (5 rounds per week for 2 weeks, total 10 rounds, acupuncture for 20 minutes at the Quze (P3, 曲澤), Tianquan (PC2, 天泉), Neiguan (PC6, 內關), and Chize (LU5, 尺澤) acupuncture points; n=10).

Arm 2: Conservative therapy only (n=10).

Two subjects in Arm 2 dropped out during the study.

### 6. Main outcome measures

Score on the Modified Ashworth Scale (MAS), Fugl-Meyer Assessment (FAM), and H-reflex/M-response (H/M ratio).

### 7. Main results

1) There was no significant between-group difference in MAS.

2) FMA showed a tendency toward improvement in Arm 1 compared to Arm 2.

3) H/M ratio was significantly decreased after 2 hours in Arm 1 ( $-34.1 \pm 34.4$  vs.  $-54.5 \pm 31.2$  in Arm 2,  $P=0.006$ ).

### 8. Conclusions

Electroacupuncture is effective for decreasing spasticity and improving functional recovery.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the effectiveness of electroacupuncture for upper-extremity spasticity due to stroke. H/M ratio was the only quantitative measure to show significant between-group differences. As the number of subjects were small and evaluation period was short, there is a need for additional clinical trials.

### 11. Abstractor

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Ko CN, Min IK, Park SW, et al. Effectiveness of bee venom acupuncture on shoulder pain after stroke. *Daehan-Hanui-Hakhoeji (Journal of Korean Oriental Medical Society)* 2007; 28(1): 11–24 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of bee venom acupuncture for shoulder pain in patients with hemiplegia after stroke.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Hospitalized patients found to have cerebral infarction or cerebral hemorrhage on brain CT or brain MRI, hemiplegia, and shoulder pain after stroke (n=46).

### 5. Intervention

Arm 1: Bee venom acupuncture (0.6 ml; venom:saline = 1: 10000) (n=24).

Arm 2: Saline placebo (0.6 ml) (n=22).

### 6. Main outcome measures

Effectiveness measured on a visual analogue scale (VAS), Pain rating score (PRS), Fugl-Meyer assessment of motor recovery, and measurement of passive external rotation.

### 7. Main results

The effectiveness and PRS were significantly improved in Arm 1 compared with Arm 2 ( $P=0.02$  and  $0.03$ , respectively).

### 8. Conclusions

Bee venom acupuncture treatment has an analgesic effect on shoulder pain in patients with hemiplegia after stroke.

### 9. Safety assessment in the article

Itching, skin flare, and pain occurred but were not specifically attributable to bee venom acupuncture.

### 10. Abstractor's comments

The shoulder pain is frequently observed in patients with hemiplegia after stroke. Many treatments such as electroacupuncture and taping have been tried for this complication of hemiplegia. Although bee venom acupuncture is highly effective, it hasn't be used in stroke patients because of concerns over adverse effects. No specific adverse effect was observed. It is suggested that a clinical trial with more patients is need to confirm the conclusion of this study.

### 11. Abstractor

Kim HJ, 17 August 2010.

## 9. Cardiovascular Diseases

### Reference

Lee DY, Lee GM, Yeom SC, et al. A clinical study of bee venom acupuncture therapy on shoulder pain patients in stroke sequelae. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2006; 23(4): 69–80 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of bee venom acupuncture therapy for shoulder pain in patients with hemiplegia after stroke.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Oriental Medical Hospital at Sanbon, Wonkwang University), Republic of Korea.

### 4. Participants

Hospitalized patients found to have cerebral infarction or cerebral hemorrhage on brain CT or brain MRI, shoulder pain on the paralyzed side, no aphasia and cognitive impairment, stabilized vital signs, and neurological symptoms (n=40).

### 5. Intervention

Arm 1: Conventional therapy (drugs, acupuncture, moxibustion, physiotherapy, kinesitherapy) + Bee venom acupuncture (n=20).

Arm 2: Conventional therapy only (n=20).

### 6. Main outcome measures

Pain intensity measured on a visual analogue scale (VAS), passive range of motion (ROM), motor function score, pain on motion score, and score on the Modified Ashworth scale for spasticity.

### 7. Main results

The decrease in pain intensity was greater in Arm 1 than Arm 2. After three weeks of treatment, the between-group difference was statistically significant ( $P<0.05$ ).

### 8. Conclusions

Treatment with bee venom acupuncture is effective for shoulder pain in hemiplegia after stroke.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

The shoulder pain occurs in 70–80% of patients with hemiplegia. The objective of this study is similar to that of the study of Ko et al (*Daehan-Hanui-Hakhoeji [Journal of Korean Oriental Medical Society]* 2007; 28 [1]: 11–24). This was a randomized clinical trial, but some requirements of randomization were not fulfilled. To improve the quality of the scientific evidence, the design of a future study should include random assignment to a placebo saline control group.

### 11. Abstractor

Kim HJ, 17 August 2010.

## 9. Cardiovascular Diseases

### Reference

Cho SW, Go KH, Nam JH, et al. The effectiveness of *Zingiberis Rhizoma* herbal acupuncture therapy and bee venom herbal acupuncture therapy on the poststroke hemiplegic shoulder pain. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2005; 15(4): 77–87 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of ginger herbal acupuncture and bee venom acupuncture on hemiplegic shoulder pain after stroke.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Oriental Medical Hospital of Dongeui Universtiy at Busan and Ulsan), Republic of Korea.

### 4. Participants

Hemiplegic patients three weeks after stroke onset and shoulder pain with Manual Muscle Test (MMT) grade 1 - 4 (n=23).

### 5. Intervention

Treatment at the Jianyu (LI15, 肩髃), Jianliao (TE14, 肩髎), Jianjing (GB21, 肩井), and Naoshu (SI10, 臑兪) acupuncture points, one round every 2 days for 2 weeks, 6 rounds in total.

Arm 1: Conservative therapy + ginger herbal acupuncture (n=12).

Arm 2: Conservative therapy + bee venom acupuncture (n=11).

### 6. Main outcome measures

Upper extremity muscle strength measured by Manual muscle test (MMT) score, pain on shoulder movement measured on a visual analogue scale (VAS), and passive range of motion (ROM).

### 7. Main results

- 1) Both ginger herbal and bee venom acupuncture significantly improved muscle strength and reduced shoulder pain ( $P<0.05$ ).
- 2) Bee venom acupuncture significantly improved every aspect of range of motion (abduction, adduction, flexion, and extension:  $P=0.005$ ,  $0.024$ ,  $0.007$ , and  $0.007$ , respectively), but ginger herbal acupuncture significantly improved only adduction and flexion (adduction and flexion:  $P=0.043$  and  $0.027$ , respectively).
- 3) There were no between-group differences in pain intensity after one and two weeks of treatment, but there was significant improvement in pain intensity between one and two weeks of treatment with bee venom acupuncture ( $P<0.032$ ).

### 8. Conclusions

Ginger herbal acupuncture and bee venom acupuncture are both effective for shoulder pain in patients with hemiplegia after stroke. Bee venom acupuncture is more effective.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the effect of ginger herbal acupuncture and bee venom acupuncture on shoulder pain after stroke, and the bee venom acupuncture had more efficacy. Insofar as the sample size is small and study period is short, the need for additional clinical study is suggested.

### 11. Abstractor

Go HY, 18 July 20

## 9. Cardiovascular Diseases

### Reference

Moon SK, Whang YK, Park SU, et al. Antispastic effect of electroacupuncture and moxibustion in stroke patients. *American Journal of Chinese Medicine* 2003; 31(3): 467–74.

### 1. Objectives

To evaluate the antispastic effect of the electroacupuncture and Moxibustion on stroke patients.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Patients with stroke onset of more than 5 weeks and a spastic elbow joint (n=35).

### 5. Intervention

Arm 1: Conservative therapy + electroacupuncture treatment at the Quchi (LI11, 曲池)-Shousanli (LI10, 手三里) or Waiguan (TE5, 外關)-Hegu (LI4, 合谷) acupuncture points for 8 rounds (n=15).

Arm 2: Conservative therapy + moxibustion treatment at the Quchi (LI11, 曲池)-Shousanli (LI10, 手三里) or Waiguan (TE5, 外關)-Hegu (LI4, 合谷) acupuncture points (n=10).

Arm 3: Control treatment group (n=10).

### 6. Main outcome measures

Score on the Modified Ashworth Scale.

### 7. Main results

Spasticity was significantly decreased at 1 and 3 hours and 5 days by electroacupuncture treatment ( $P<0.05$ ), but not by moxibustion treatment.

### 8. Conclusions

Electroacupuncture temporarily relieves spasticity in patients with stroke, and repeated application maintains relief.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluates the effectiveness of electroacupuncture and moxibustion on spasticity due to stroke. Electroacupuncture had significant efficacy for spasticity. This 8-week study failed to show any significant efficacy of moxibustion treatment. A future large scale and long term clinical trial is needed to test moxibustion at other acupuncture points and using other treatment courses.

### 11. Abstractor

Go HY, 18 July 2010.



## 9. Cardiovascular Diseases

### Reference

Choi YS, Kim TK, Jung WS, et al. Effects of moxibustion on the hemiplegic upper extremity after stroke. *Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)* 2003; 24(2): 283–89 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of the moxibustion in stroke patients with upper extremity hemiplegia.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Patients with middle cerebral artery infarction, upper extremity dyspraxia, and Fugl-Meyer motor score ( $> 45$ ) (n=46).

### 5. Intervention

Arm 1: Conservative therapy + moxibustion applied to the Hegu (LI4, 合谷), Quchi (LI11, 曲池), Zhongzhu (TE3, 中渚), Waiguan (TE5, 外關) acupuncture points until the patient had the sensation of heat, once a day for 2 weeks (n=20).

Arm 2: Conservative therapy only (n=20).

### 6. Main outcome measures

Fugl-Meyer motor score, Motricity Index score, and Modified Barthel Index.

### 7. Main results

In Arm 1, Fugl-Meyer motor score increased from  $14.3 \pm 11.3$  before treatment to  $27.8 \pm 17.3$  after treatment (score difference =  $13.6 \pm 7.5$ ,  $P=0.038$ ) and Motricity Index increased from  $29.8 \pm 21.3$  to  $48.1 \pm 20.6$  (score difference =  $18.2 \pm 10.2$ ,  $P=0.002$ ). Although these two indices indicated greater improvement in Arm 1 than Arm 2, there was no between-group difference in MBI.

### 8. Conclusions

Moxibustion at the affected site may relieve upper extremity dyspraxia after stroke.

### 9. Safety assessment in the article

No severe adverse events during the 4-week observation period.

### 10. Abstractor's comments

This study evaluated the effectiveness of moxibustion for upper extremity dyspraxia after stroke. However, since the number of subjects was small and the study period was short, additional studies are needed.

### 11. Abstractor and date

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Lee SH, Kim JK, Son YH, et al. A clinical study of moxibustion therapy's effect on functional recovery in hemiplegia on stroke. *Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)* 2008; 29(1): 278–84 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of moxibustion stimulation for recovery of function in patients with hemiplegia after stroke.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Oriental Medical Hospital of Dongeui Universtiy), Republic of Korea.

### 4. Participants

Forty-two hemiplegic stroke patients with functional independence scores of 11–35 within 8 weeks since onset. The lesion were in the middle cerebral artery or basilar artery.

### 5. Intervention

Arm 1: Conservative therapy + moxibustion for 6 weeks applied to the Hegu (LI4, 合谷), Waiguan (TE5, 外關), Quchi (LI11, 曲池), Taichong (LR3, 太冲), Xuanzhong (GB39, 懸鐘), Zusanli (ST36, 足三里) acupuncture points (n=21).

Arm 2: Conservative therapy only (n=21).

### 6. Main outcome measures

Functional independence measure (FIM).

### 7. Main results

Decrease in FIM score was significantly greater in Arm 1 (19.3±9.9 to 44.7±12.5) than Arm 2 (19.9±10.8 to 36.5±10.7) ( $P=0.001$ ).

### 8. Conclusions

Moxibustion may improve the functional recovery of hemiplegic patients after stroke.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the effectiveness of moxibustion for improving the functional recovery of hemiplegic patients after stroke. It is suggested that moxibustion has efficacy in stroke patients. However, the small number of patients, the effectiveness of conservative therapy, and lack of long term treatment were limitations of the study. Therefore an additional clinical trial is needed.

### 11. Abstractor and date

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Yun SP, Jung WS, Park SU, et al. Effects of moxibustion on the recovery of post-stroke urinary symptoms. *American Journal of Chinese Medicine* 2007; 35(6): 947–54.

### 1. Objectives

To evaluate the effect of moxibustion on recovery from post-stroke urinary symptoms.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

Two Oriental hospitals (Kyunghee University Oriental Medical Center and Saint Paul's Oriental Medical Center), Republic of Korea.

### 4. Participants

Patients with post-stroke urinary symptoms and International Prostate Symptom Score (IPSS) more than 10 (n=39).

### 5. Intervention

Arm 1: Conservative therapy + moxibustion applied to the Zhongji (CV3, 中極), Guanyuan (CV4, 關元), and Qihai (CV6, 氣海) acupuncture points for 10 days (5 rounds per day).(n=20).

Arm 2: Conservative therapy only.(n=19).

### 6. Main outcome measures

IPSS, and Barthel Index (BI).

### 7. Main results

IPSS improved after the treatment in both groups. Urinary frequency, quality of life, irritative subscore, and total score were more markedly improved in Arm 1 compared to Arm 2 in patients with mild or moderately severe symptoms, but not in patients with very severe symptoms. Moreover, there was no between-group difference in BI.

### 8. Conclusions

Moxibustion at the Zhongji, Guanyuan, Qihai acupuncture points can improve urinary symptoms in post-stroke patients.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study showed that moxibustion was effective for post-stroke urinary symptoms. However, small number of subjects, short evaluation period, and unclear therapeutic activity of moxibustion were limitations. So additional studies are needed.

### 11. Abstractor and date

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Na BJ, Jung JH, Choi CM, et al. Effects of Banhahubak-tang (Banxiahoupotang) on patients with poststroke depression. *Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)* 2005; 26(3): 563–74 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of the Ban Ha Hu Bak-tang (Banxiahoupotang, 半夏厚朴湯) for post-stroke depression.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

The patients with post-stroke depression (n=38).

### 5. Intervention

Arm 1: Treatment with Ban Ha Hu Bak-tang (半夏厚朴湯) for 7 days (n=19).

Arm 2: Other treatments generally used for post-stroke depression for 7 days (n=19).

### 6. Main outcome measures

Beck Depression Inventory (BDI), Modified Barthel Index (MBI), and Ki score.

### 7. Main results

Based on BDI score, improvement in poststroke depression was more significant in yin syndrome patients than in yang syndrome patients. Both of the Yin-patients showed significant improvement in BDI score.

### 8. Conclusions

Ban Ha Hu Bak-tang has efficacy for poststroke depression in yin syndrome patients.

### 9. Safety assessment in the article

The adverse events of Ban Ha Hu Bak-tang were evaluated by an investigator who didn't participate in patient treatment and was blinded to group allocation.

### 10. Abstractor's comments

This study evaluated the efficacy of Ban Ha Hu Bak-tang in 38 patients with post-stroke depression. Ban Ha Hu Bak-tang is known to reduce Ki and improve gastrointestinal problems and neurotic symptoms. Ban Ha Hu Bak-tang improved BDI, MBI, and Ki scores (measures of depression severity) in patients with poststroke depression classified as yin syndrome. As the control treatments were not mentioned and were diverse, the control in this study was inappropriate.

### 11. Abstractor

Cho SH, 13 July 2010.

## 9. Cardiovascular Diseases

### Reference

Kim MB, Chung SK, Kim SS. The influences of Chuna (shoulder traction) therapy for shoulder pain and range of movement in hemiplegic patients after stroke. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2007; 17(2): 185–98 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of Chuna (shoulder traction) therapy for shoulder pain in hemiplegic patients after stroke.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Stroke patients with shoulder pain (over grade 4 on a visual analogue scale [VAS]) and limited shoulder range of motion (ROM) (n=60).

### 5. Intervention

Arm 1: Conservative therapy + Chuna (shoulder traction, basically once a day for 2 weeks, a total of 10 treatments) (n=30).

Arm 2: Conservative therapy only (n=30).

### 6. Main outcome measures

Among the participants, 10 subjects dropped out during the study (4 in Arm 1, 6 in Arm 2). VAS score for elbow joint pain intensity, passive range of motion of the shoulder joint, MRC (Medical Research Council) score for muscle strength, Meridian-Electromyograph Analysis, and Shoulder Subluxation analysis.

### 7. Main results

The VAS score for elbow joint pain intensity was significantly decreased after two weeks of treatment in Arm 1 ( $4.76 \pm 2.26$  vs.  $7.75 \pm 1.83$  before treatment,  $P=0.000$ ), and shoulder joint ROM (including abduction, adduction, external rotation, and internal rotation) was significantly improved. At the end of treatment, the VAS scores were decreased in both groups (Arm 1= $2.98 \pm 2.20$ , Arm 2= $0.67 \pm 1.70$ ;  $P=0.000$ ).

### 8. Conclusions

Chuna (shoulder traction) may relieve shoulder pain in hemiplegic patients after stroke.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the effectiveness of Chuna (shoulder traction) for shoulder pain in hemiplegic patients after stroke. Insofar as Chuna improves the ROM and reduces pain, it can be helpful for the rehabilitation in stroke patients. But, as the number of patients was small and patients were not followed up after the end of treatment, additional studies are needed.

### 11. Abstractor and date

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Kwon OG, Jang WS, Woo CH, et al. The efficacy of adjusting leg length inequality by Chuna manual treatment for post stroke hemiplegia. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2009; 19(2): 187–202 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of the Chuna manual treatment for hemiplegia after stroke.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

Two Oriental hospitals (Oriental Medical Hospital of Daegu Haany University at Daegu and Gumi), Republic of Korea.

### 4. Participants

Stroke patients with hemiplegia more than two weeks after onset and stable vital signs (n=39).

### 5. Intervention

Arm 1: Conservative therapy + Chuna manual treatment (n=20).

Arm 2: Conservative therapy only (n=19).

### 6. Main outcome measures

Activities of daily living (ADL), Modified Barthel Index (MBI), Berg Balance Scale (BBS), and evaluation of lower extremity motor function using the Fugl-Meyer Assessment (FMA).

### 7. Main results

1) In Arm 1, treatment significantly improved ADL and function as measured by MBI ( $4.80 \pm 5.12$ ,  $P=0.045$ ), BBS ( $3.50 \pm 2.59$ ,  $P=0.003$ ), and FMA ( $2.40 \pm 2.60$ ,  $P=0.020$ ) scores. The improvement was more marked in Arm 1 than in Arm 2.

2) In patients with sub-acute disease, treatment significantly improved function as measured by BBS score ( $4.00 \pm 2.83$ ,  $P=0.002$ ), but improvements in the treatment and control groups were not significantly different ( $P=0.159$ ).

3) In patients with chronic disease, treatment significantly improved function as measured by BBS ( $2.75 \pm 2.12$ ,  $P=0.011$ ) and FMA ( $1.63 \pm 2.39$ ,  $P=0.039$ ) scores, but this improvement was similar in both groups.

### 8. Conclusions

Chuna manual treatment may improve ADL, balance, and lower extremity function. Chuna manual treatment appears to be more effective for chronic disease.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the effectiveness of Chuna manual treatment in the rehabilitation of patients after stroke. But the small number of subjects and the effectiveness of the conservative therapy are limitations of the study. Furthermore, the evaluation of leg length is a subjective measure with low accuracy. Therefore, it is suggested that a large scale clinical trial is needed.

### 11. Abstractor and date

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Ryu SH, Lee KS, Kim TK, et al. Effects of electroacupuncture on the hemiplegic upper extremity after stroke. *Daehan-Hanui-Hakhoeji (Journal of Korean Oriental Medical Society)* 2002; 23(2): 180–9 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effectiveness of electroacupuncture for upper extremity hemiplegia after stroke.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

#### 4. Participants

Patients with cerebral infarction and Fugl-Meyer motor score below 46 before treatment within two weeks of stroke onset (n=40).

#### 5. Intervention

Arm 1: Conservative therapy + electroacupuncture (25–50 Hz) for 4 weeks, 6 rounds per week, 20 minutes per round applied to the Quchi (LI11, 曲池)- Shousanli (LI10, 手三里), Waiguan (TE5, 外關)- Hegu (LI4, 合谷) acupuncture points (n=20).

Arm 2: Conservative therapy (n=20).

#### 6. Main outcome measures

Fugl-Meyer motor assessment, muscle strength at the shoulder and elbow joint, the subsection of the modified Barthel Index (involving drinking, feeding, dressing the upper body, and grooming).

#### 7. Main results

Fugl-Meyer motor assessment score tended to be higher in Arm 1 than in Arm 2 ( $P=0.061$ ). The improvements in muscle strength and coordination at the shoulder and elbow joint were significantly greater in Arm 1 ( $P=0.008$  and  $0.047$ , respectively), but the improvements in muscle strength and coordination at the hand and wrist were similar in both groups. There were no between-group differences in drinking, feeding, dressing the upper body, and grooming after treatment.

#### 8. Conclusions

Electroacupuncture has efficacy for upper extremity paralysis after stroke.

#### 9. Safety assessment in the article

No significant adverse events during 4 weeks of observation.

#### 10. Abstractor's comments

This study evaluated the effectiveness of electroacupuncture for upper extremity paralysis after stroke. As the number of subjects was small and conservative therapy was used with electroacupuncture, the result is not conclusive. Moreover, the follow up period was only 4 weeks, so the long-term effect of electroacupuncture remains unclear. Thus, additional studies are needed.

#### 11. Abstractor and date

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Hong JW, Choi CM, Park YM, et al. The effect of 2 Hz vs. 120 Hz frequency electrical acupuncture point stimulation on motor recovery after stroke by motor evoked potential study. *Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)* 2006; 27(1): 265–75 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of electroacupuncture at different frequencies on motor function recovery after stroke.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Patients with cerebral infarction, and hospitalized 1 week to 1 month after onset (n=42).

### 5. Intervention

Stimulation at the Hegu (LI4, 合谷), Quchi (LI11, 曲池), Shousanli (LI10, 手三里), and Waiguan (TE5, 外關) acupuncture points of the upper extremity on the affected side. Stimulation at the Zusanli (ST36, 足三里), Shangjuxu (ST37, 上巨虛), Xuanzhong (GB39, 懸鐘), and Taichong (LR3, 太沖) acupuncture points of the lower extremity on the affected side.

Arm 1: Low frequency (2 Hz) electroacupuncture point stimulation for 2 weeks (n=21).

Arm 2: High frequency (120 Hz) electroacupuncture point stimulation for 2 weeks (n=21).

### 6. Main outcome measures

General items (personal details and hypertension, diabetes mellitus, history of present illness, biochemical tests), Motor Evoked Potential (MEP), National Institutes of Health Stroke Scale (NIHSS) score, Modified Barthel Index (MBI), Modified motor assessment scale (MMAS).

### 7. Main results

MEP was significantly more improved in Arm 1 than in Arm 2. Although low frequency treatment (compared to high frequency treatment) improved NIHSS, MBI, and MMAS scores, the between-group differences in these were not significant.

### 8. Conclusions

Low frequency electroacupuncture point stimulation is more effective for restoring motor function after stroke.

### 9. Safety assessment in the article

Not mentioned

### 10. Abstractor's comments

This study evaluated the effect of low and high frequency electroacupuncture point stimulation on motor function recovery after stroke. Low frequency stimulation had more effect on the central nervous system. However, the study period was short, and it is thought that a long-term study with a large number of patients is needed.

### 11. Abstractor and date

Go HY, 18 July 2010.



## 9. Cardiovascular Diseases

### Reference

Chung WS, Kim SS. Effects of Whangryunheadoc-tang Gami-bang (Huanglianjiedu-Tan JiaWei-Fang) on acute stage stroke patients. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2004; 14(1): 107–18 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of Whangryunheadoc-tang Gami-bang (Huanglianjiedu-Tan JiaWei-Fang, 黃連解毒湯加味方) on acute stage stroke.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Patients with stroke within 3 months of onset, and carotid artery stenosis (n=23; age range 40–70).

### 5. Intervention

Arm 1: Conservative therapy + Whangryunheadoc-tang Gami-bang (Huanglianjiedu-Tan JiaWei-Fang) for 3 weeks, 3 rounds per week, oral administration one hour postprandially (n=13).

Arm 2: Conservative therapy only (n=10).

### 6. Main outcome measures

Measurement of cerebral blood flow change, blood lipid level change, National Institutes of Health Stroke Scale (NIHSS) score, and Modified Barthel Index.

### 7. Main results

Carotid stenosis ( $8.68 \pm 6.12\%$  in Arm 1 vs.  $1.18 \pm 1.55\%$  in Arm 2;  $P=0.001$ ) and blood lipid level were significantly improved in Arm 1. Treatment significantly decreased total cholesterol ( $-23.0 \pm 29.6$ ) and LDL cholesterol ( $-12.8 \pm 25.4$ ) levels and significantly increased HDL ( $5.23 \pm 7.18$ ) level in Arm 1. NIHSS and MBI improved significantly in both Arms, but there were no between-group differences.

### 8. Conclusions

Whangryunheadoc-tang Gami-bang improves carotid blood flow, blood lipid level, and function in hemiplegic patients after stroke.

### 9. Safety assessment in the article

No hepatotoxicity and nephrotoxicity were observed during the study period.

### 10. Abstractor's comments

This study evaluated the effect of Whangryunheadoc-tang Gami-bang (Huanglianjiedu-Tan JiaWei-Fang) on hemiplegia after stroke. Stroke symptoms were improved and no adverse effects were observed. It is thought that Whangryunheadoc-tang Gami-bang (Huanglianjiedu-Tan JiaWei-Fang) facilitates recovery of nerve function and protects nerve function. However, as the influence of conservative therapy and external factors could not be excluded, additional studies are needed.

### 11. Abstractor and date

Go HY, 18 July 2010.

## 9. Cardiovascular Diseases

### Reference

Park SU, Jung WS, Moon SK, et al. Chunghyul-dan (Qingxie-dan) improves arterial stiffness in patients with increased baPWV. *American Journal of Chinese Medicine* 2006; 34(4): 553–63.

### 1. Objectives

To evaluate the effect of Chunghyul-dan (清血丹, Qingxie-dan) on arterial stiffness.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center Kangnam Korean Hospital), Republic of Korea.

### 4. Participants

Patients with brachial-ankle pulse wave velocity (baPWV) of >1400 cm/sec (n=35).

### 5. Intervention

Arm 1: Chunghyul-dan (清血丹, Qingxie-dan) 500 mg, 3 times a day for 8 weeks (n=20).

Arm 2: Simple observation (n=15).

### 6. Main outcome measures

baPWV, blood pressure, and levels of serum lipid, aspartate aminotransferase (AST), alanine aminotransferase (ALT), blood urea nitrogen (BUN), and creatinine (Cr).

### 7. Main results

Treatment for 8 weeks significantly improved PWV score in Arm 1 (1736.0±271.1 [baseline] vs. 1599.0±301.9 [8 weeks], p=0.032), but not in Arm 2 (1668.3±116.2 [baseline] vs. 1653.3±184.1 [8 weeks], P=0.774) and significantly increased triglycerides level (156.1±51.3 [baseline] vs. 230.7±74.2 [8 weeks], P=0.007). But there were no significant changes in blood pressure and the levels of other serum lipids. .

### 8. Conclusions

Chunghyul-dan decreases arterial stiffness.

### 9. Safety assessment in the article

There were no abnormal laboratory findings (liver and renal function tests).

### 10. Abstractor's comments

This study evaluated the effect of Chunghyul-dan on arterial stiffness. A decrease in arterial stiffness was observed. As 8 weeks is a short period and a control treatment was not used, additional studies are needed.

### 11. Abstractor and date

Go HY, 18 July 2010.

## 10. Respiratory Diseases (including Rhinitis)

### Reference

Park YC, Jo JH, Hong KE, et al. Effect of acupuncture on nasal obstruction in patients with persistent allergic rhinitis: a randomized controlled trial. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2005; 22(6): 229–39 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of acupuncture on nasal obstruction with acupuncture points specified in *Donguibogam* (東醫寶鑑, *Treasured Mirror of Eastern Medicine*).

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Dunsan Oriental Hospital of Daejeon), Republic of Korea.

### 4. Participants

Patients with persistent allergic rhinitis who visited the hospital between 1 August and 7 October 2005 (n=101).

### 5. Intervention

Arm 1: Acupuncture treatment at the Yingxiang (LI20, 迎香), Shangxing (GV23, 上星), and Hegu (LI4, 合谷) acupuncture points (n=50).

Arm 2: Sham acupuncture treatment at non-acupuncture points: one at the center of the Yingxiang (LI20, 迎香) and Juliao (ST3, 巨膠) acupuncture points, and the other 20 mm from the Hegu (LI4, 合谷) acupuncture point (n=51).

### 6. Main outcome measures

Measurement of total nasal volume (NV) and total nasal minimum cross sectional area (MCA) using acoustic rhinometry.

### 7. Main results

The total nasal volume and total nasal minimum cross sectional area (MCA) were significantly increased immediately after treatment in both groups ( $P<0.05$ ) and the increases were moderately greater 15 minutes after treatment in Arm 1 compared with Arm 2.

### 8. Conclusions

Acupuncture treatment relieves nasal obstruction by increasing nasal volume and nasal cross sectional area in patients with persistent allergic rhinitis.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the efficacy of acupuncture points specified in *Donguibogam* on nasal obstruction in patients with persistent allergic rhinitis. The patients were randomized to Arm 1 and Arm 2. Treatment relieved nasal obstruction by increasing nasal volume and nasal cross sectional area in Arm 1. This finding is very meaningful, as it is from a double blind, randomized, controlled trial. But the randomization method was not mentioned specifically.

### 11. Abstractor and date

Jang KT, 30 August 2010.

## 10. Respiratory Diseases (including Rhinitis)

### Reference

Park YC. Effect of Socheongryong-tang on Punghan and Pungyeol type common cold: A double blind, placebo controlled study. *Dongui-Saengli-Byeongli-Hakhoeji (Korean Journal of Oriental Physiology & Pathology)* 2005; 19(2): 524–9 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of Socheongryong-tang (小青龍湯) on the common cold.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One public health center (Public Health Center in Daejeon University), Republic of Korea.

### 4. Participants

Patients with common cold who visited the center from 29 March to 24 April 2004 (n=98).

### 5. Intervention

Arm 1: Socheongryong-tang (小青龍湯) treatment group (1.8 g t.i.d.) (n=49).

Arm 2: Placebo control group (n=49).

Three capsules per round, 3 rounds per day for 7 days.

After analysis of the first questionnaire data, 8 patients in Arm 2 and 7 patients in Arm 1 dropped out. Two patients who dropped out in Arm 1 were of the Hyeopseup (挾濕, carry-moisture) type. Finally, 81 subjects (41 in Arm 2 and 40 in Arm 1) participated in the study. There were 7 subjects of the Pungyeol (風熱, wind-heat) type in Arm 2 and 11 in Arm 1. There were also 34 subjects of the Punghan (風寒, wind-cold) type in Arm 2 and 29 in Arm 1.

### 6. Main outcome measures

Index of common cold severity based on a 14-item checklist of common cold symptoms (cough, throat discomfort, sputum, rhinorrhea, stuffy nose, sneezing, headache, fever, sweating, myalgia, anorexia, chilliness, bitter taste, mouth dryness, eyeball discomfort), assessed on a 5-point scale (1=very good, 2=good, 3=moderate, 4=uncomfortable, 5=very uncomfortable).

### 7. Main results

In the pungyeol (風熱, wind-heat) type and punghan (風寒, wind-cold) type of common cold, the between-group difference in global index was not significant before and after treatment. However, in the punghan (風寒, wind-cold) type of common cold, between-group differences in rhinorrhea, stuffy nose, and sneezing were significant ( $P<0.05$ ).

### 8. Conclusions

Socheongryong-tang affects rhinorrhea and stuffy nose in the punghan type of common cold.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

In this study, common cold was classified as pungyeol type and punghan type according to the traditional Korean method of diagnosis. In Arm 1, Socheongryong-tang treatment had a significant effect on rhinorrhea and stuffy nose in punghan type colds but no effect on pungyeol type colds. This finding is very meaningful, as this is a double blind, randomized, controlled trial. However, the method of randomization was not mentioned specifically, and it is hard to draw a conclusion based on subjective index data.

### 11. Abstractor and date

Jang KT, 30 August 2010.

## 10. Respiratory Diseases (including Rhinitis)

### Reference

Bae HH, Kang WC, Park YC. Effectiveness of a Yeonkyopaedok-san extract in the treatment of the common cold: Results of a community-based, double blind, randomized placebo controlled trial. *Dongui-Saengli-Byeongli-Hakhoeji (Korean Journal of Oriental Physiology & Pathology)* 2008; 22(1): 234–45 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of a Yeonkyopaedok-san (連翹敗毒散) for the common cold.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One public health center (Public Health Center in Daejeon University), Republic of Korea.

### 4. Participants

Male and female patients with more than one symptom of the common cold, diagnosed by a doctor of Oriental medicine, within 3 days of the appearance of subjective symptoms (n=200).

### 5. Intervention

Arm 1: Treatment group. Yeonkyopaedok-san (連翹敗毒散; Sam-A Pharmaceucial Co. Ltd., dry extract) (800 mg) (n=100).

Arm 2: Control group. Pyungwi-san (平胃散, Sam-A Pharmaceutical Co. Ltd., dry extract) (n=100).  
First treatment: 1 pouch per round, 3 times a day for 3 days. Second treatment: 1 pouch per round, 3 times a day for 4 days

### 6. Main outcome measures

Index of common cold severity based on a 14-item checklist of common cold symptoms (cough, throat discomfort, sputum, rhinorrhea, stuffy nose, sneezing, headache, fever, sweating, myalgia, anorexia, chilliness, bitter taste and mouth dryness, eyeball discomfort), assessed on a 5-point scale (1=very good, 2=good, 3=moderate, 4=uncomfortable, 5=very uncomfortable).

### 7. Main results

Treatment had a statistically significant effect at 7 days ( $P=0.027$ ), moderate effect at 3 days ( $P=0.081$ ), and difference in the magnitude of the effect at 3 and 7 days was significant ( $P=0.039$ ). There was a statistically significant difference in headache ( $P=0.029$ ) and throat discomfort ( $P=0.054$ ), and a moderate difference in sneezing ( $P=0.065$ ) after 3 days of treatment, and a significant difference in headache ( $P=0.012$ ), anorexia ( $P=0.037$ ), eyeball discomfort ( $P=0.002$ ), and moderate difference in sneezing ( $P=0.093$ ), bitter taste, and mouth dryness ( $P=0.090$ ), sweating ( $P=0.059$ ) after 7 days of treatment. In Arm 1, there's significant difference in wind-heat (風熱) type ( $P=0.057$ ), and there was no between-group difference in the disappearance of subjective symptoms ( $P=0.592$ ).

### 8. Conclusions

Yeonkyopaedok-san relieves common cold symptoms, and therefore can be an effective drug for the treatment of common colds.

### 9. Safety assessment in the article

Mild headache and digestive problems were observed in the Yeonkyopaedok-san treatment group.

### 10. Abstractor's comments

This study compares the effect of Yeonkyopaedok-san with that of a control drug, Pyungwi-san, on the common cold. The results are very meaningful because this trial is double blind, randomized, and controlled. Although the randomization method was not mentioned specifically, and the between-group differences were evaluated by t-test, the data from this study can be used as clinical reference data for the common cold.

### 11. Abstractor and date

Jang KT, 30 August 2010.

## 10. Respiratory Diseases (including Rhinitis)

### Reference

Kim JH, Ko JM, Lee SW, et al. Clinical study on the effect of moxa-pellet treatment in allergic rhinitis patients. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2007; 24(1): 175–85 (in Korean with English abstract).

### 1. Objectives

To evaluate the efficacy of moxa-pellet treatment for allergic rhinitis.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Patients with persistent allergic rhinitis who visited the hospital between 1 August and 31 August 2006 (n=39).

### 5. Intervention

Arm 1: Real moxa-pellet treatment at the Fengchi (GB20, 風池), Hegu (LI4, 合谷), Zusanli (ST36, 足三里), Lieque (LU7, 列缺), and Dazhui (GV14, 大椎) acupuncture points (n=19). Moxa-pellet is a 21mm diameter, applied adhesives on one side with 3 hemispheric solid materials attached on same side. Solid material is composed with vegetable and mineral ingredients.

Arm 2: Control group. Only adhesive sheets attached to the Fengchi (GB20, 風池), Hegu (LI4, 合谷), Zusanli (ST36, 足三里), Lieque (LU7, 列缺), and Dazhui (GV 14, 大椎) acupuncture points (n=20).

### 6. Main outcome measures

Nasal symptom score (NSS) for sneezing, rhinorrhea, and itchiness. Medical outcomes on a 36-item short-form health survey (SF-36).

### 7. Main results

Treatment significantly improved total nasal symptom score as well as scores for sneezing, rhinorrhea, and itchiness, and SF-36 scores for role limitation-emotional, social functioning, and mental health in Arm 1 ( $P<0.05$ ). But treatment significantly improved only the score for headache while failing to improve any SF-36 score and significantly worsened physical functioning in Arm 2.

### 8. Conclusions

The moxa-pellet treatment provides symptom relief and improves the quality of life of allergic rhinitis patients.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the efficacy of moxa-pellet treatment for allergic rhinitis. This treatment significantly improved nasal symptoms and quality of life. But the randomization method was not specified and the treatment effect was only verified by nasal symptom score, which is insufficient to evaluate efficacy clearly.

### 11. Abstractor and date

Jang KT, 30 August 2010.

## 11. Diseases of the Digestive System

### Reference

Song MS, Heo YK, Choi KW, et al. Clinical comparison study on 40 cases of temporomandibular disorder patients with idiopathic scoliosis treated by Chuna and general Oriental method. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2005; 22(5): 133–40 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of Chuna treatment on temporomandibular disorder in patients with idiopathic scoliosis.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Daejeon Oriental Hospital), Republic of Korea.

### 4. Participants

Patients who visited the hospital with temporomandibular disorder as their chief complaint and idiopathic scoliosis (n=40, male/female=18/22).

### 5. Intervention

Acupuncture applied to the Waiguan (TE5, 外關), Hegu (LI4, 合谷), Kunlun (UB60, 崑崙), Toulinqi (GB15, 頭臨泣), Zusanli (ST36, 足三里) acupuncture points for 20–30 minutes.

Arm 1: Acupuncture + Chuna treatment for 5 weeks, twice a week. (n=20)

Arm 2: Acupuncture only. (n=20)

### 6. Main outcome measures

Facial pain score, temporomandibular function score, and limitation of activity score.

### 7. Main results

There was significant improvement in facial pain, temporomandibular function, and temporomandibular activity in both groups. Chuna treatment significantly enhanced improvements in temporomandibular function and activity ( $P<0.05$ ).

### 8. Conclusions

Combining Chuna treatment with acupuncture enhances the effect of acupuncture on temporomandibular disorder in patients with idiopathic scoliosis.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This randomized, controlled trial aimed to determine the efficacy of Chuna treatment on temporomandibular disorder concurrent with idiopathic scoliosis. When temporomandibular disorder occurs with idiopathic scoliosis, parallel use of acupuncture and Chuna treatment is more effective. The study's limitations were lack of a detailed method, small number of subjects, and incomplete blinding, randomization, and evaluation.

### 11. Abstractor and date

Kim JS, 12 July 2010.

## 11. Diseases of the Digestive System

### Reference

Kim TS, Kim CY, Lee KH, et al. Comparative clinical study between the acupuncture treatment and the chuna treatment on temporomandibular disorder. *Cheokchu-Singyeong-Chuna-Ui-Hakhoeji (The Journal of Korea Chuna Manual Medicine for Spine and Nerves)* 2006; 1(1): 55–64 (in Korean with English abstract).

### 1. Objectives

To compare the effectiveness of Sa-am acupuncture treatment and Chuna treatment for temporomandibular disorder.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Ha-na Oriental Medical Hospital), Republic of Korea.

### 4. Participants

Patients with temporomandibular disorder (n=31, male/female=7/24).

### 5. Intervention

Six rounds of treatment using a muscle relaxation method.

Arm 1: Acupuncture at the Damjeonggyeok (膽正格) and Wijeonggyeok (胃正格) acupuncture points selectively, followed by rotated acupuncture for 20 minutes using the Bu-Xie (捻轉補瀉) technique (n=16).

Arm 2: Chuna treatment (n=15).

### 6. Main outcome measures

Anamnestic dysfunction index, modified craniomandibular index, mandibular movement (MM) index, temporomandibular joint noise (TN).

### 7. Main results

The MM index was higher in Arm 1 than in Arm 2 and TN improvement was greater in Arm 2 than in Arm 1.

### 8. Conclusions

Acupuncture can improve temporomandibular function (movement), while Chuna treatment can reduce structural impediments to temporomandibular joint movement (causing joint noise).

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study compared the effectiveness of Sa-am acupuncture with that of Chuna treatment for temporomandibular disorder. Acupuncture improved temporomandibular function while Chuna improved temporomandibular structure. But the number of patients was small, and there was no randomization or blinding. Simultaneous evaluation of the two intervention methods could be a limitation of the study.

### 11. Abstractor and date

Kim JS, 12 July 2010.



## 11. Diseases of the Digestive System

### Reference

Park YC, Kang W, Choi SM, et al. Evaluation of manual acupuncture at classical and nondefined points for treatment of functional dyspepsia: a randomized-controlled trial. *Journal of Alternative and Complementary Medicine* 2009; 15(8): 879–84.

### 1. Objectives

To compare the effectiveness of acupuncture applied to classical acupuncture points with that applied to nondefined points for functional dyspepsia.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Daejeon Oriental Hospital), Republic of Korea.

### 4. Participants

Patients with functional dyspepsia classified according to ROME-II criteria (n=68) (male/female=14/54; median age, 32.5; age range, 20–60).

### 5. Intervention

Arm 1: Classical acupuncture at 11 acupuncture points including Hegu (LI4, 合谷), Taichong (LR3, 太冲), Zusanli (ST36, 足三里), Neiguan (PC6, 内关), Gongsun (SP4, 公孙), and Zhongwan (CV12, 中脘). Each sterilized needle (diameter 0.25 mm, length 30 mm) was inserted 1–2.5 cm deep for 15 minutes, 3 times a week for 2 weeks.

Arm 2: Sham acupuncture at nondefined points 1 cm from the classical acupuncture points.

### 6. Main outcome measures

Nepean Dyspepsia Index (NDI), Quality of life (QOL).

### 7. Main results

After 2 weeks of acupuncture treatment, the NDI score (an indicator of severity of functional dyspepsia) was significantly decreased in Arm 1 (59.6±22.0 [baseline] vs. 25.4±18.0 [2 weeks]) and Arm 2 (55.7±22.9 [baseline] vs. 26.4±15.7 [2 weeks]);  $P<0.001$ ) and the QOL subscore of the NDI was significantly improved (67.1±15.1 [baseline] vs. 88.3±7.7 [2 weeks]) in Arm 1 and (70.5±19.7 [baseline] vs. 86.5±9.8 [2 weeks]) in Arm 2. But there were no between-group differences.

### 8. Conclusions

Both treatments improve the symptoms and quality of life of patients with functional dyspepsia.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the effect of acupuncture on functional dyspepsia. Acupuncture treatment at the Hegu, Taichong, Zusanli, Neiguan, Gongsun, and Zhongwan acupuncture points 3 times a week, 15 minutes per round, once a day, for 2 weeks was compared with treatment at nondefined points 1 cm away from these classical acupuncture points. Both treatments were effective. But insofar as improvement in functional dyspepsia can be due to a placebo effect, a clear difference between the treatment and control groups cannot be shown.

### 12. Abstractor and date

Kim JS, 10 June 2010.

## 11. Diseases of the Digestive System

### Reference

Kim YM, Park YC, Jo JH, et al. Effect of herb medicine treatment for functional dyspepsia: a randomized placebo-controlled and compared standard treatment trial. *Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)* 2010; 31(1): 1–13 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of herb medicine (DA-9701) for functional dyspepsia.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Daejeon Oriental Hospital), Republic of Korea.

### 4. Participants

Functional dyspepsia patients (n=42; male/female=9/33).

### 5. Intervention

Three times a day, one tablet each time, for 2 weeks.

Arm 1: Herb medicine (DA-9701) treatment group. Herb medicine is composed of Sinapis Semen (白芥子) 100 mg, Corydalis Tuber (玄胡索) 200 mg, Pharbitidis Semen (牽牛子) 200 mg, microcrystalline cellulose, lactose, starch 100 mg, a yellowish brown colored rectangular tablet.

Arm 2: Standard drug (Mosapride) treatment group. Mosapride citrate 5 mg, a gray colored rectangular tablet.

Arm 3: Placebo control group. Microcrystalline cellulose, lactose, starch 600 mg, a gray colored rectangular tablet.

### 6. Main outcome measures

Nepean Dyspepsia Index (NDI), Functional Dyspepsia Quality of Life (QOL) score.

### 7. Main results

All treatments significantly improved functional dyspepsia symptoms evaluated by comparing the Nepean Dyspepsia index and functional dyspepsia QOL score before and after treatment within each group (DA-9701,  $P<0.05$ ; Mosapride,  $P<0.01$ ; placebo,  $P<0.001$ ), but there were no statistically significant differences in these measures among the three groups.

### 8. Conclusions

Herb medicine (DA-9701) improves the symptoms and QOL of patients with functional dyspepsia.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This randomized, controlled trial evaluated the effect of herb medicine (DA-9701) on functional dyspepsia. The herb medicine (DA-9701) treatment significantly improved NDI and QOL scores, but there were no significant differences in these scores between Arm 2 and Arm 3. Because of its limitations (single-blinded randomization, inappropriate inclusion and exclusion criteria, lack of an equivalence and non-inferiority trial design), this study should be considered a pilot study.

### 11. Abstractor and date

Kim JS, 12 July 2010.

## 11. Diseases of the Digestive System

### Reference

Park JW, Yoon SW, Kim JS, et al. A clinical pilot study of Carthami-Semen herbal acupuncture treatment for chronic constipation. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2008; 25(5): 127–37 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of Carthami-Semen herbal acupuncture treatment for chronic constipation.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Hospital at Gangdong), Republic of Korea.

### 4. Participants

Patients with functional constipation or irritable bowel syndrome with constipation (n=20; male/female=4/16).

### 5. Intervention

Arm 1: Carthami-Semen herbal acupuncture treatment (0.1 cc injection and 1/2-1 inch needle insertion) at 7 acupuncture points including Tianshu (ST25, 天樞), Daju (ST27, 大巨), Zhishi (UB52, 志室), and Qihai (CV6, 氣海). A total of 8 rounds treatment were provided over 4 weeks, twice a week.

Arm 2: Saline injection at the same acupuncture points using the same treatment method.

### 6. Main outcome measures

Scoring system for stool consistency and ease of evacuation.

### 7. Main results

At 1 week after the 4-week treatment, scores for stool frequency, hardness, and ease of evacuation were significantly improved in Arm 1 ( $P<0.005$ ). But there were no significant improvements in these scores in Arm 2.

### 8. Conclusions

The Carthami-Semen herbal acupuncture has efficacy for chronic constipation.

### 9. Safety assessment in the article

Injection site bruising, moderate pain, and skin flare during injection occurred in several cases, but no severe adverse events were attributable to herbal acupuncture treatment.

### 10. Abstractor's comments

This study is the first randomized, controlled clinical trial to evaluate the efficacy of Carthami-Semen herbal acupuncture for chronic constipation. Patients classified as functional constipation and constipation with irritable bowel syndrome were treated with Carthami-Semen herbal acupuncture treatment on 7 acupuncture points including Tianshu, Daju, Zhishi, Qihai. Patients classified as Arm 1 and Arm 2, and evaluated for stool frequency, hardness, and ease of evacuation. Compared to the control treatment, Carthami-Semen herbal acupuncture significantly improved symptoms. The study has sufficient quality inasmuch as the procedures for randomization and blinding were properly executed, but the small number of subjects and single blinding are limitations.

### 11. Abstractor and date

Kim JS, 13 July 2010.

## 11. Diseases of the Digestive System

### Reference

Son DH, Joh KH, Kim YS, The comparison study on the effect of bowel movement between Bo-Ryu Enema (保留灌腸, Bao-Liu Enema) and general enema in patients at the acute stage of cerebrovascular accident. *Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)* 2001; 22(3): 51–62 (in Korean with English abstract).

### 1. Objectives

To compare the effect of the Bo-Ryu enema (Bao-Liu enema) with that of general (conventional) enema in patients with acute stroke.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Oriental Medical Hospital at Jeonju, Woosuk University), Republic of Korea.

### 4. Participants

Acute stroke patients who have gone 3 days without defecating, or less than 3 days with abdominal discomfort and satiety (n=63; male/female=34/29).

### 5. Intervention

Bo-Ryu enema:

Arm 1: Administration of a Finger glycerin enema 1 hour before the Bo-Ryu enema (200 cc of Daeseungkitang [大承氣湯] in two volumes of water boiled before use). One round was performed in the morning and one in the afternoon. (n=10)

Arm 2: Same as Arm 1, except only one round was performed. (n=19)

General enema:

Arm 3: Administration of a Finger-glycerin enema once in the morning and once in the afternoon. (n=16)

Arm 4: Administration of a Finger-glycerin enema once in the morning. (n=18)

### 6. Main outcome measures

Defecation frequency, stool volume, change in abdominal examination (level of tension in the rectus abdominis muscle, change in the abdominal strength), change in relevant symptoms (abdominal discomfort, digestion state, physical strength).

### 7. Main results

The Bo-Ryu enema was more effective than the general enema for increasing defecation frequency, total stool volume, corrected stool volume, abdominal strength, and physical strength. The increase in defecation frequency and abdominal strength was greater in Arm 1 than Arm 2 and the increase in corrected stool volume and decrease in abdominal discomfort was greater in Arm 2 than Arm 1.

### 8. Conclusions

The Bo-Ryu enema is more cathartic than the general enema: it reduces the level of tension in the rectus abdominis muscle and relieves the abdominal discomfort.

### 9. Safety assessment in the article

The enemas had no effect on body temperature, respiratory rate, blood pressure, and pulse rate, which were remained within normal range.

### 10. Abstractor's comments

This randomized, controlled study compared the efficacy of the Bo-Ryu enema with that of the general enema in acute stage stroke patients. The subjects were divided into 4 groups according to enema type and frequency. The Bo-Ryu enema was more effective than the glycerin enema in increasing defecation frequency and stool volume, and in changing tension and strength of the abdominis rectus and relevant symptoms. Nonetheless, there were limitations: the method used to evaluate the level of tension in rectus abdominis muscle was insufficient, errors occurred in subject allocation, and the methods used to evaluate the main outcome measures were unclear.

### 11. Abstractor and date

Kim JS, 12 July 2010.

## 11. Diseases of the Digestive System

### Reference

Hong SH, Kwon OS, Kim SH et al. Effects of Injinoryung-San on alcoholic hepatitis. *Dongui-Saengli-Byeongli-Hakhojeji (Korean Journal of Oriental Physiology & Pathology)* 2008; 22(1): 204–8 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of Injinoryung-san (茵陳五苓散) on alcoholic hepatitis.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

Two Oriental hospitals (Daejeon Oriental Hospital and Oriental Medicine Hospital of Dongeui Universtiy), Republic of Korea.

### 4. Participants

Thirty-one male subjects who drank more than once a week and 40 g a day (age range, 20–70) with elevated serum aspartate transaminase (AST), alanine transaminase (ALT), and gamma-( $\gamma$ )-glutamyl transferase (GGT) levels and no clinical findings of hepatoma, hepatic cirrhosis, viral hepatitis, drug-induced hepatitis, and metabolic disorders by abdominal ultrasonography.

### 5. Intervention

Arm 1: Injinoryung-san (茵陳五苓散) treatment for 2 weeks.

Arm 2: Placebo control treatment for 2 weeks.

During the study, 4 subjects were excluded from the efficacy evaluation (2 for violation of inclusion/exclusion criteria, 1 for violation of drug intake restrictions, and 1 for insufficient adaptability). Twenty-seven subjects (15 in Arm 1, 12 in Arm 2) were finally included for analysis.

### 6. Main outcome measures

Abdominal ultrasonography findings, blood biochemistry including serum levels of AST, ALT and GGT, and mean cell volume (MCV) 2, 4, and 6 weeks after treatment. Changes in body composition before and after treatment.

### 7. Main results

There were no between-group differences in AST, ALT, and AST/ALT. But GGT level after 2 weeks, MCV and GGT level after 4 weeks, and MCV after 6 weeks were significantly lower in Arm 1 than in Arm 2.

### 8. Conclusions

Injinoryung-san (茵陳五苓散) may have a partial effect on alcoholic hepatitis.

### 9. Safety assessment in the article

Hangover symptoms the day after treatment and a skin rash on both thighs developed in one patient in Arm 1. The symptoms were thought to be drug-related and disappeared a week after the end of treatment. Hepatic dysfunction became worse in one patient in Arm 1, but this patient failed to attend his follow up visit. In laboratory tests, all values were within normal range.

### 10. Abstractor's comments

In this study, the treatment period was short and many patients dropped out before the end of the study. A search for new Oriental drug candidates for treating alcoholic hepatitis is needed.

### 11. Abstractor and date

Cho JH, 16 July 2010.

## 12. Skin Diseases

### Reference

Shin SH, Kim JH, Kim MB, et al. A clinical research about the effects of Seunggaltang on patients with atopic dermatitis. *Daehan-Hanbang-AnIbiinhupibugwa-Hakhoeji (Journal of Korean Oriental Medical Ophthalmology Otolaryngology Dermatology)* 2007; 20(2): 199–212 (in Korean with English abstract).

### 1. Objectives

To evaluate the efficacy of Seunggal-tang (升葛湯) powder extract for atopic dermatitis.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Oriental Medicine Hospital of Dongeui Universtiy), Republic of Korea.

### 4. Participants

Thirty-nine patients (age range: 14 - 65 years) diagnosed with atopic dermatitis using the criteria of Hanifin and Rajka.

### 5. Intervention

Arm 1: Treatment with Seunggal-tang (升葛湯) extract was orally administered for 8 weeks, 3 times per day (n=13, male/female=8/5).

Arm 2: Treatment with placebo extract was orally administered for 8 weeks, 3 times per day (n=10, male/female=1/9).

### 6. Main outcome measures

1) Skin variables– oil content, transepidermal water loss (TEWL), skin water content, erythema, and melanoderma.

2) Self-developed clinical severity Index.

3) Blood variables- IgE level and mast cell count.

### 7. Main results

Sixteen subjects dropped out during the study. Skin water content around the Yintang (EX-HN3, 印堂) acupuncture point was significantly increased 8 weeks after treatment ( $P=0.0168$ ). Treatment in Arm 1 reduced clinical severity (itchiness and sleep problems), and neither treatment significantly affected the blood variables.

### 8. Conclusions

Seunggal-tang (升葛湯) improves subjective symptoms.

### 9. Safety assessment in the article

Safety was confirmed by comparison of the results of blood tests and urine analysis before and after treatment.

### 10. Abstractor's comments

This study is highly meaningful as it had a randomized, controlled design. However, as the drop-out rate was high, the reliability of the trial is decreased. Most studies on atopic dermatitis in Korea examine reactions to topical products, such as cosmetics, ointment, shampoo, etc. Therefore, this study is highly meaningful as it has a randomized, controlled design and evaluates the effect of oral herbal medicine on atopic dermatitis. I think that the high drop-out rate in this study illustrates the difficulty of conducting a clinical trial of a systemic herbal remedy. So, I think that this study is valuable not for its result but for its methods.

### 11. Abstractor and date

Nam HJ, 8 June 2010.

## 12. Skin Diseases

### Reference

Kim SH, Yun DC, Kim HT, et al. A clinical research of atopic dermatitis treated by Yeongyuseungmatang (連翹升麻湯) in cosmetics. *Daehan-Hanbang-AnIbiinhupibugwa-Hakhoeji (Journal of Korean Oriental Medical Ophthalmology Otolaryngology Dermatology)* 2008; 21(2): 126–41 (in Korean with English abstract).

### 1. Objectives

To evaluate the efficacy of cosmetics containing Yeongyuseungma-tang (連翹升麻湯) on atopic dermatitis patients.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (Semyung University Oriental Medicine Hospital), Republic of Korea.

### 4. Participants

Thirty-three patients aged over 16 years old with atopic dermatitis diagnosed using the Hanifin and Rajka criteria.

### 5. Intervention

Arm 1: Moisturizing cream containing Yeongyuseungma-tang (連翹升麻湯) applied to skin with atopic dermatitis for 4 weeks, 2–3 times per day (n=17).

Arm 2: Atopico Skincare Cream applied to skin with atopic dermatitis for 4 weeks, 2–3 times per day (n=16).

### 6. Main outcome measures

1) SCORing Atopic Dermatitis (SCORAD) Index.

2) Blood variables– total IgE level, eosinophil count.

3) Skin variables– skin surface temperature, transepidermal water loss (TEWL), skin water content, skin acidity.

4) Global efficacy assessment by subjects.

### 7. Main results

Four-week treatment significantly decreased the SCORAD index in both groups ( $P=0.014$  in Arm 1 and  $0.021$  in Arm 2), and increased skin surface temperature, skin water content, and skin acidity significantly in both groups. Changes in total IgE level was not significant. Treatment in Arm 1 significantly increased scores on the global efficacy assessment, while it significantly decreased eosinophil count and TEWL.

### 8. Conclusions

The efficacy and safety of cosmetics containing Yeongyuseungma-tang (連翹升麻湯) are greater than those of Atopico Skincare Cream.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

Insofar as this study was performed under conditions maintained by a thermo-hygrostat and using proper skin testing equipment, the results are meaningful. Moreover, since Atopico Skincare Cream is used widely by atopic dermatitis patients, the fact that cream containing Yeongyuseungma-tang has similar efficacy is very promising. However, the authors failed to account for the decrease in eosinophil count, increase in IgE level, and increase in TEWL despite the increase in skin water content in the control group.

### 11. Abstractor and date

Nam HJ, 8 June 2010.

## 12. Skin Diseases

### Reference

Yun DC, Kim HT, Kim EH, et al. Clinical research of atopic dermatitis treated by Hwangryeonhaedok-Tang (黃連解毒湯) in cosmetics. *Dongui-Saengli-Byeongli-Hakhoeji (Korean Journal of Oriental Physiology & Pathology)* 2008; 22(6); 1611–20 (in Korean with English abstract).

### 1. Objectives

To evaluate the efficacy of cosmetics containing Hwangryeonhaedok-Tang (黃連解毒湯) for atopic dermatitis.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (Semyung University Oriental Medicine Hospital), Republic of Korea.

### 4. Participants

Thirty-one patients aged over 16 years old diagnosed with atopic dermatitis using the criteria of Hanifin and Rajka.

### 5. Intervention

Arm 1: A moisturizing cream containing Hwangryeonhaedok-Tang (黃連解毒湯) applied to skin with atopic dermatitis for 4 weeks, 2–3 times per day (n=15, male/7, female/8).

Arm 2: A moisturizing cream alone applied to skin with atopic dermatitis for 4 weeks, 2–3 times per day (n=16, male/3, female/13).

### 6. Main outcome measures

1) SCORing Atopic Dermatitis (SCORAD) Index.

2) Blood variables– total IgE level, eosinophil count.

3) Skin variables– skin surface temperature, transepidermal water loss (TEWL), skin water content, skin pH.

4) Global efficacy assessment by subjects.

### 7. Main results

Treatment significantly decreased the SCORAD index and increased skin water content and global efficacy in Arm 1 compared to Arm 2 ( $P=0.008$  and  $0.03$ , respectively).

There were no between-group differences in total IgE level, eosinophil count, skin surface temperature, TEWL, and skin acidity.

### 8. Conclusions

Moisturizing cream containing Hwangryeonhaedok-Tang improves atopic dermatitis.

### 9. Safety assessment in the article

No severe adverse events.

### 10. Abstractor's comments

This study comparing moisturizing creams with and without Hwangryeonhaedok-Tang has provided more meaningful results than other similar previous studies. However, it is unclear why transepidermal water loss (TEWL) was increased in both groups. As this study was performed under conditions maintained by a thermo-hygrostat and using proper skin testing equipment, this study is meaningful.

### 11. Abstractor and date

Nam HJ, 9 June 2010.



## 12. Skin Diseases

### Reference

Kim CH, Hwang DS, Kim JT, et al. A randomized, double-blind, placebo-controlled study to herbal shampoo and essence about dandruff. *Daehan-Hanbang-AnIbinihupibugwa-Hakhoeji (Journal of Korean Oriental Medical Ophthalmology Otolaryngology Dermatology)* 2007; 20(3): 222–35 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of herbal shampoo and essence on dandruff.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (Daejeon Orinetal Hospital), Republic of Korea.

### 4. Participants

Patients with dandruff and *Pityrosporum ovale*, the yeast thought to be the cause of dandruff (n=47).

### 5. Intervention

Arm 1: Two-week treatment with herbal shampoo and essence; hair washed once a day in the morning (n=25, male/female=14/11).

Arm 2: Two-week treatment with conventional shampoo and essence; hair washed once a day in the morning (n=22, male/female=19/3).

### 6. Main outcome measures

- 1) Cell count of the dandruff-producing organism.
- 2) Measurement of sebum secretion rate on upper part of forehead using a Sebumeter®.
- 3) Subjective symptoms score.

### 7. Main results

In Arm 1, treatment significantly decreased the number of *P. ovale* cells and rate of sebum secretion ( $P=0.0083$ ,  $0.0182$  respectively). In both Arm 1 and Arm 2, subjective symptom scores were significantly improved (Arm 1,  $P=0.0006$ ; Arm 2,  $P=0.0182$ ), but there was no significant between-group difference.

### 8. Conclusions

The herbal shampoo and essence treatment reduces dandruff.

### 9. Safety assessment in the article

None. However, no adverse reactions occurred in a previous study using the 2-day herbal patch test in normal male volunteers (n=20).

### 10. Abstractor's comments

In traditional Korean medicine, dandruff is considered to be a sign of seborrheic dermatitis caused by the accumulation of dampness-heat (濕熱) in the spleen and stomach, or due to blood regulation by external wind-heat (風熱). This study confirmed the effectiveness of shampoo/essence containing extracts of five herbs (*Sophora Radix*, *Asiasarum sieboldi*, *Coptis chinensis* Franch, *Fritillaria thunbergii* Miquel, and *Atractylodes lancea* DC) for dandruff. Insofar as the safety of the shampoo was previously established and *P. ovale* cell count provided objective data, the results of this study are meaningful.

### 11. Abstractor and date

Nam HJ, 8 June 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Lee SH, Hong SJ, Kim SY, et al. Randomized, controlled, double blind study of bee venom therapy on rheumatoid arthritis. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2003; 20(6): 80–8 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effect of bee venom therapy on rheumatoid arthritis.

#### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

#### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

#### 4. Participants

Rheumatoid arthritis patients (n=80).

#### 5. Intervention

Arm 1: Bee venom acupuncture treatment (n=40).

Arm 2: Saline treatment (n=40).

Treatment was twice a week, for 2 months (total 16 treatments) and was applied to local acupuncture points at the sites of inflammation. These sites with acupuncture points were the:

- (1) hand including distal interphalangeal joint (DIP), proximal interphalangeal joint (PIP), metacarpophalangeal joint (MCP), and wrist joint—Yanggu (SI5, 陽谷), Yangchi (TE4, 陽池), Yangxi (LI5, 陽溪), and Daling (PC7, 大陵) acupuncture points;
- (2) elbow joint—Quchi (LI11, 曲池), Tianding (LI17, 天鼎), and Xiaohai (SI8, 小海) acupuncture points;
- (3) shoulder joint—Jianyu (LI15, 肩髃) and Jianliao (TE14, 肩髃) acupuncture points;
- (4) knee joint—Heding (EX-LE2, 鶴頂), Xiyan (EX-LE5, 膝眼), Zusanli (ST36, 足三里), Yanglingquan (GB34, 陽陵泉), and Yinlingqun (SP9, 陰陵泉) acupuncture points;
- (5) ankle joint—Qiuxu (GB40, 丘墟), Shenmai (UB62, 申脈), Shangqiu (SP5, 商丘), and Zhaohai (KI6, 照海) acupuncture points.

Prescribed medications were continued without change throughout the course of the study.

Among 80 subjects enrolled, 11 subjects dropped out during the study (8 in Arm 1, 3 in Arm 2).

Reasons for drop out included: lack of cooperation (n=5), problems with transport (n=3), adverse events (n=2), uncertainty of efficacy (n=1).

#### 6. Main outcome measures

- 1) Number of tender joints, number of swollen joints, morning stiffness, pain assessed on a visual analogue scale (VAS, Health assessment questionnaire (HAQ) score.
- 2) Erythrocyte sedimentation rate (ESR), C-reactive protein (CRP) level.

#### 7. Main results

##### 1) Clinical symptom evaluation

Two-month (but not one-month) treatment significantly decreased the number of tender joints, number of swollen joints, and morning stiffness in Arm 1 vs. Arm 2 (2.5±1.4, 2.5±1.4, 1.4±0.8 vs. 3.4±2.8, 3.4±2.8, 1.9±1.2, respectively,  $P<0.05$ ).

##### 2) Quality of life (QOL) evaluation

Similarly, 2-month but not 1-month treatment significantly decreased HAQ score in Arm 1 vs. Arm 2 (0.7±0.6 vs. 0.4±0.3,  $P<0.05$ ). There was a significant between-group difference in VAS score for pain after 1 month of treatment (48.5±2.3 [Arm 1] vs. 58.9±17.4 [Arm 2]) and 2 months of treatment (40.3±2.7 [Arm 1] vs. 57.2±27.8 [Arm 2]), and the decrease in VAS score was significantly greater in Arm 1 ( $P<0.05$ ).

##### 3) ESR and CRP evaluation

The decrease in ESR and CRP level was significantly greater in Arm 1 than in Arm 2 after 1 month of treatment (28.3±12.0, 1.1±1.3, vs. 30.6±19.8, 2.5±4.6 [Arm 2]) and after 2 months of treatment (18.3±10.3, 0.8±0.7 vs. 37.7±24.5, 2.5±2.5 [Arm 2]) ( $P<0.05$ ).

#### 8. Conclusions

Bee venom acupuncture improves clinical symptoms, QOL, and inflammation. Effectiveness requires more than 2 months of treatment.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

This study compares the effectiveness of bee venom acupuncture to that of saline placebo control for rheumatoid arthritis. Bee venom acupuncture elicited an objective therapeutic response from patients with rheumatoid arthritis. This study was a randomized controlled trial. The reasons for drop-out but not the randomization and blinding methods were clearly described, and the analysis was per-protocol and not by intention-to-treat. Moreover, the saline treatment had limitations as a placebo control.

#### 11. Abstractor and date

Kim JI, 28 June 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Byun H, Kim SW, Ahn JH, et al. Individualized acupuncture vs. standardized acupuncture in symptomatic treatment of osteoarthritis of the knee—a randomized controlled trial (IS Randomized, controlled trial N 40706107). *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2007; 24(4): 183–95 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effect of personalized acupuncture (Sa-Am acupuncture [舍岩鍼]) on osteoarthritis of the knee.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Dongkuk University Ilsan Oriental Hospital), Republic of Korea.

#### 4. Participants

Patients with knee degenerative osteoarthritis meeting American College of Rheumatology (ACR) classification criteria (n=50).

#### 5. Intervention

Arm 1: Standard local acupuncture + personalized Sa-Am acupuncture (n=25).

Arm 2: Standard local acupuncture (n=25).

Acupuncture treatment: 2 treatments a week for 6 weeks, 12 treatments in total.

Local acupuncture (applied to 6 acupuncture points in the affected site): Yanglingquan (GB 34 陽陵泉), Yinlingqun (SP9, 陰陵泉), Dubi (ST35, 犢鼻), Xiyian (EX-LE5, 膝眼), Heding (EEX-LE2, 鶴頂), and Ashi (阿是). If pain occurred in both knees, both were treated. All patients received the same, mixed frequency stimulation (i.e. alternating low [2Hz] with high [30Hz] frequency stimulation) (applied to 4 Sa-Am acupuncture points in unaffected sites): Ganjeonggyeok (肝正格), Ganseunggyeok (肝勝格), Sinjeonggyeok (腎正格), and Sinseunggyeok (腎勝格). If pain occurred in both knees, the knee with less pain was treated.

Among 50 subjects enrolled, 3 dropped out (all in Arm 1).

Reasons for dropping out: loss to follow-up (n=1), relocation (n=1), pain during acupuncture treatment (n=1)

#### 6. Main outcome measures

Pain self-assessed on a visual analogue scale (VAS), and scores on the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC), 36-Item Short-Form Health Survey (SF-36), Lequesne Functional Index (LFI), Korean Version of Health Assessment Questionnaire (KHAQ).

#### 7. Main results

Treatment significantly decreased the pain VAS, WOMAC, LFI, and KHAQ scores, but not SF-36 score.

The effect of personalized acupuncture and standard acupuncture:

From the fitted regression line of VAS and WOMAC before and after 3, 6, and 18 weeks of treatment in Arm 1, VAS score decreased slightly as treatment progressed and returned to pretreatment level after 18 weeks of treatment.

Regarding the equilibrium box diagram of VAS, VAS scatter was much larger in Arm 1 than Arm 2 at baseline, 3 weeks, and 6 weeks, but not at 18 weeks. Regarding the change in median VAS and WOMAC scores, both scores decreased continuously in Arm 1 and Arm 2, but increased at 18 weeks in Arm 2.

There was no between-group difference in LFI and KHAQ.

#### 8. Conclusions

Both treatments relieve symptoms and are safe. Personalized acupuncture can provide even more pain relief by 3 months after treatment.

#### 9. Safety assessment in the article

No adverse events occurred.

#### 10. Abstractor's comments

This randomized controlled trial compared treatment with personalized acupuncture (local acupuncture points: electroacupuncture, Distal acupuncture points: Sa-Am acupuncture) with standard acupuncture (local acupuncture points: electroacupuncture) for knee osteoarthritis. A flowchart of the trial was presented, results were recorded according to STRICTA recommendations, and the number of drop-out and excluded subjects were clearly indicated. The study was single blind, but blinding of all the subjects, investigators, and diagnosticians (but not clinicians) was possible. However, the use of per protocol analysis was a limitation of this study and the values in graphs are not clear, and so results cannot be interpreted. Moreover, the difficulty of knowing what part of the treatment effect is due to spontaneous remission is another serious limitation.

#### 11. Abstractor and date

Kim JI, 14 June 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Park IS, Jung CY, Jang MK, et al. A randomized clinical trial of local acupuncture points compared with distal acupuncture points in degenerative osteoarthritis on knee. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2008; 25(2): 227–42 (in Korean with English abstract).

#### 1. Objectives

To compare the effect of treatment at local acupuncture points and distal acupuncture points on knee degenerative osteoarthritis.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Dongkuk University Ilsan Oriental Hospital), Republic of Korea.

#### 4. Participants

Patients with knee degenerative osteoarthritis meeting American College of Rheumatology (ACR) classification criteria (age, 55–80; n=26).

#### 5. Intervention

Arm 1: Washout (2 weeks) followed by acupuncture (local acupuncture points), washout, and acupuncture (distal acupuncture points) (n=13).

Arm 2: Washout (2 weeks), followed by acupuncture (distal acupuncture points), washout, and acupuncture (local acupuncture points) (n=13).

Acupuncture was performed 3 times per week for 2 weeks.

Local acupuncture points (i.e., acupuncture points at affected sites): Dubi (ST35, 犢鼻), Xiyian (EX-LE5, 膝眼), Heding (EX-LE2, 鶴頂), and Ashi (阿是).

Distal acupuncture points (i.e., acupuncture points at unaffected sites): 4 points selected from among the Ganshu (BL18, 肝俞), Shenshu (BL23, 腎俞), Kunlun (BL60, 崑崙), Xuanzhong (GB39, 懸鐘), Sanyinjiao (SP6, 三陰交), Xingjian (LR2, 行間), Jiexi (ST41, 解溪), and Taixi (KI3, 太溪) acupuncture points.

If pain was present on both sides of the body, both sides were treated (at a total of 8 acupuncture points).

Among 26 subjects, 9 dropped out.

Reasons for patient withdrawal: Pain during or after the acupuncture (n=4), relocation (n=2).

Patients with WOMAC score less than 40 (n=3) were excluded.

#### 6. Main outcome measures

Pain assessed on a visual analogue scale (VAS), Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) score.

#### 7. Main results

Local acupuncture significantly decreased pain VAS score and WOMAC score, and distal acupuncture significantly decreased WOMAC pain subscore and overall WOMAC score. There was a significant between-group difference in WOMAC score ( $47.5 \pm 17.1$  [local acupuncture] vs.  $58.1 \pm 10.5$  [distal acupuncture],  $P=0.036$ ).

#### 8. Conclusions

Both treatments significantly improve osteoarthritis symptoms. Based on overall WOMAC score, local acupuncture is more effective than distal acupuncture. Efficacy does not depend on the sequence of local and distal acupuncture treatment.

#### 9. Safety assessment in the article

No adverse events occurred.

#### 10. Abstractor's comments

This study compared the efficacy of local acupuncture with that of distal acupuncture as treatment. A flowchart of the trial was presented, the results were recorded according to STRICTA recommendations, and the number of drop-out and excluded subjects were clearly indicated. The study was single blind, but blinding of all the subjects, investigators, and diagnosticians (but not clinicians) was possible. The authors used per protocol analysis, and the drop-out rate was very high (34.6%, 9 of 26 subjects).

#### 11. Abstractor and date

Kim JI, 7 June 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Kim HB, Lee RM, Lee MH, et al. Comparative study of effects of ‘Intramuscular bee venom herbal acupuncture’ and ‘Intracutaneous bee venom herbal acupuncture’ in knee osteoarthritis patients. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2008; 25(2): 151–64 (in Korean with English abstract).

#### 1. Objectives

To compare the effect of ‘intramuscular bee venom herbal acupuncture’ and ‘intracutaneous bee venom herbal acupuncture’ in knee osteoarthritis patients.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

#### 4. Participants

Patients with knee osteoarthritis and knee pain over 6 months (age, >40 years; n=45).

#### 5. Intervention

Arm 1: Intramuscular bee venom herbal acupuncture (n=21), Treatment (0.5 cc/knee).

Arm 2: Intracutaneous bee venom herbal acupuncture (n=24). Treatment (0.1 cc per acupuncture point, total 0.5 cc) applied to the Heding 鶴頂 (EX-LE2), Xiyang 膝眼 (EX-LE5), Dubi (ST35, 犢鼻), Zusanli (ST36, 足三里), and Ququan (LR8, 曲泉) acupuncture points.

Twice a week for 4 weeks, total 8 times.

Oriental therapies in other Oriental hospitals was not permitted, but ambulatory care such as acupuncture and Oriental drugs, and TDP thermotherapy in the clinical trial setting were permitted. The analgesics e.g., conventional NSAIDs and other COX-2 selective inhibitors, used before the trial were permitted during and until the end of the trial.

Among 45 subjects enrolled, 13 dropped out (4 in Arm 1, 9 in Arm 2).

Reasons for withdrawal: Onset of another disease (n=3), missing information on questionnaire (n=3), unable to attend follow-up evaluation appointments (n=3), loss to follow-up (n=2), unsatisfied with treatment effect (n=2)

#### 6. Main outcome measures

Korean Pain Assessment Card score, Korean Western Ontario and McMaster Universities Osteoarthritis Index (KWOMAC) score, pain severity scored on a visual analogue scale (VAS), 36-Item Short-Form Health Survey (SF-36) score, Overall Outcome on a nine point scale.

#### 7. Main results

Both treatments significantly decreased KWOMAC score. There was no significant between-group difference. Treatment in Arm 1 significantly increased subscores of the SF-36 for physical function (64.1±17.6 vs. 73.5±16.0 after treatment,  $P=0.006$ ) and bodily pain (48.7±12.4 vs. 60.4±19.3,  $P=0.006$ ). But there was no significant between-group difference. Both treatments significantly improved overall outcome, but there was no significant between-group difference.

Improvement in knee pain evaluated on a 9-point scale was evaluated as excellent (n=1, 5.9%), good (n=11, 64.7%), fair (n=3, 17.6%), and poor (n=2, 11.8%) in Arm 1 and excellent (n=0), good (n=10, 66.7%), fair (n=4, 26.6%), and poor (n=1, 6.7%) in Arm 2. The mean score were 5.8±2.0 and 5.6±1.1 in Arm 1 and Arm 2 respectively. Both treatments significantly improved overall outcome, but there was no significant between-group difference.

#### 8. Conclusions

Both intramuscular and intracutaneous bee venom herbal acupuncture are effective with similar efficacy in knee osteoarthritis.

#### 9. Safety assessment in the article

Itching (n=2, 11.8%), swelling (n=1, 5.9%), pain (n=1, 5.9%) were reported to be adverse effects of intramuscular treatment, and itching (n=4, 26.7%) and swelling (n=1, 6.7%) were reported to be adverse effects of intracutaneous treatment. These events were mild (Mueller Grade 0), and occurred with similar frequency in each group.

#### 10. Abstractor’s comments

In this study, the method of randomization (computerized randomization, block size 4), criteria for inclusion and exclusion, use of concomitant drugs, and reasons for withdrawal were described in detail, and safety was assessed. The knee ultrasonography results are for future reference. The authors found no between-group difference and concluded that bee venom herbal acupuncture has efficacy, but no control treatment was included for comparison. The objectivity of the analysis could have been improved by addition of a control.

#### 11. Abstractor and date

Kim JI, 24 June 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Kim SC, Na WM, Lee SY, et al. A study on pain relief effects and allergic responses for the osteoarthritis of the knee joint between sweet bee venom and bee venom pharmacopuncture. *Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)* 2008; 11(1): 31–40 (in Korean with English abstract).

#### 1. Objectives

To compare the effect of sweet bee venom (enzyme removed) pharmacopuncture with that of bee venom pharmacopuncture on knee osteoarthritis.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Oriental Medical Hospital at Gwangju, Wonkwang University), Republic of Korea.

#### 4. Participants

Patients with degenerative knee osteoarthritis (age, >50; n=30).

#### 5. Intervention

Arm 1: Sweet bee venom (SBV) pharmacopuncture (n=15).

Arm 2: Bee venom (BV) pharmacopuncture (n=15).

Three treatments a week for 2 weeks.

One cc (total) was applied to the Yanglingquan (GB34, 陽陵泉), Yinlingqun (SP9, 陰陵泉), Dubi (ST35, 犢鼻) Heding [EX-LE2, 鶴頂]), Xiyan (EX-LE5, 膝眼), and pressure pain point (壓痛點) acupuncture points. The side of the body with the most pain was treated.

During the clinical trial, use of any Western and Eastern drugs was restricted.

#### 6. Main outcome measures

Pain self-assessed on a visual analogue scale (VAS).

#### 7. Main results

Treatment in Arm 1 provided significantly more pain relief throughout the body ( $18.2 \pm 15.2$  vs.  $15.6 \pm 16.3$ ,  $P=0.002$ ) and pain relief at the affected site ( $33.3 \pm 8.3$  vs.  $25.9 \pm 15.3$ ,  $P=0.000$ ). Delayed-type hypersensitivity responses occurred at a significantly lower frequency in Arm 1.

#### 8. Conclusions

Sweet bee venom pharmacopuncture is a better analgesic than bee venom pharmacopuncture.

#### 9. Safety assessment in the article

No immediate-type and delayed-type hypersensitivity reactions occurred.

Site pain due to treatment began 6 hours after treatment and lasted 6 hours in Arm 1, and began 6 hours after treatment and lasted 24 hours in Arm 2. Adverse events of bee venom treatment were severe edema and flare (n=3, every treatment), moderate edema and flare (n=4, 5<sup>th</sup> and 6<sup>th</sup> treatment), moderate itching (n=3, every treatment and lasting 48 hours), itching (n=4, at 5<sup>th</sup> and 6<sup>th</sup> treatment and lasting 24 hours). Adverse events of sweet bee venom treatment were minor edema and flare (n=2, at 1<sup>st</sup> and 2<sup>nd</sup> treatments) and minor itching (n=2, at 1<sup>st</sup> and 2<sup>nd</sup> treatment and lasting 3 hours).

#### 10. Abstractor's comments

This study evaluated the efficacy and safety of sweet bee venom pharmacopuncture. The study hypothesis was that sweet bee venom pharmacopuncture caused less hypersensitivity. The results showed that sweet bee venom pharmacopuncture was much safer. Although the results were reported according to STRICTA recommendations, the randomization method and study design were not described. Moreover, pain VAS score was the only variable. A quantitative clinical trial is needed.

#### 11. Abstractor and date

Kim JI, 5 July 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Yang KR, Song HS. A comparative study of warm needling and bee venom pharmacopuncture on osteoarthritis of the knee—a randomized controlled trial. *Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)* 2008; 11 (2): 21–31 (in Korean with English abstract).

#### 1. Objectives

To compare the effect of bee venom pharmacopuncture with that of warm needling on knee osteoarthritis.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Kyungwon University Orineal Hospital), Republic of Korea.

#### 4. Participants

Knee osteoarthritis patients (age, 50–70; n=49).

#### 5. Intervention

Patients were assigned to two groups according to a computer-generated randomization table.

Arm 1: Bee venom pharmacopuncture (BVP; n=25, number of drop outs=7).

Arm 2: Warm needling (WN; n=24, number of drop outs=9).

Twice a week for 8 weeks (16 rounds in all).

Treatment acupuncture points: 4–6 acupuncture points were selected from among the following: Yinlingqun (SP9, 陰陵泉), Xuehai (SP10, 血海), Ququan (LR8, 曲泉), Xiyangguan (GB33, 膝陽關), Yanglingquan (GB34, 陽陵泉), Weizhong (UB40, 委中), Liangqiu (ST34, 梁丘), Yingu (KI10, 陰谷), and the 1 and 2 A-Shi and treated.

1) Sweet bee venom treatment: 0.01 ml applied to the above acupuncture points (less than 0.2 ml in total) was followed by acupuncture for 20 minutes at the same acupuncture points.

2) Warm needling treatment: Acupuncture and moxa sticks burned 7–8 minutes, followed by acupuncture for 20 minutes all at the above acupuncture points.

Among 49 subjects enrolled, 16 dropped out during the study (7 in Arm 1, 9 in Arm 2).

Reasons for withdrawal: another disease (n=1), inability to continue (n=2), personal reasons (n=3)

#### 6. Main outcome measures

Korean Western Ontario and McMaster Universities Osteoarthritis Index (KWOMAC) score, pain self-assessed on a visual analogue scale (VAS), 36-Item Short Form Health Survey (SF-36) score.

#### 7. Main results

##### 1) KWOMAC, VAS

Compared with WN, BVP resulted in significantly improved VAS score ( $-3.4 \pm 1.5$  in BVP vs.  $-3.1 \pm 1.0$  in WN), KWOMAC total score ( $-14.4 \pm 8.4$  in BVP vs.  $-9.1 \pm 6.4$  in WN) and function subscore ( $-11.1 \pm 5.9$  in BVP vs.  $-6.3 \pm 4.4$  in WN) after 8 weeks of treatment ( $P < 0.05$ ). There was no significant between-group difference in subscales other than the function subscale.

##### 2) SF-36

After 8 weeks of treatment, there was no significant between-group difference in the SF-36 total score ( $-11.8 \pm 7.1$  in BVP vs.  $-9.7 \pm 5.3$  in WN), physical health score ( $-15.1 \pm 9.2$  in BVP vs.  $-13.2 \pm 8.1$  in WN), and mental health score ( $-8.4 \pm 8.6$  in BVP vs.  $-7.0 \pm 8.7$  in WN).

#### 8. Conclusions

BVP is more effective than WM (i.e., provides more satisfaction and better functional improvement).

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

This study compared the efficacies of two therapies. However, these efficacies were not clear without a control group for comparison. Additional study is needed.

#### 11. Abstractor and date

Kim JI, 1 July 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Seo BK, Ryu SR, Kang JW, et al. Clinical study of the efficacy and safety of Jetongdan on patients with osteoarthritis of the knee. *Daehan-Hanui-Hakhoeji (Journal of Korean Oriental Medical Society)* 2005; 26(2): 231–40 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effect of Jetongdan on Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) OA (an index of knee osteoarthritis severity).

#### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

#### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

#### 4. Participants

Knee osteoarthritis patients (n=80).

#### 5. Intervention

Arm 1: Jetongdan treatment for 8 weeks, 3 doses per day, 3 capsules per dose (n=42).

Arm 2: Placebo treatment. Placebo capsule with same treatment regimen (n=38).

If non-steroidal inflammatory drugs were used, treatment was started after a 1-week washout period.

#### 6. Main outcome measures

WOMAC; erythrocyte sedimentation rate (ESR).

Each index was recorded before treatment, and 4 weeks and 8 weeks after treatment.

#### 7. Main results

Treatment significantly accelerated the decrease in composite WOMAC score and WOMAC physical function subscore in Arm 1 compared with Arm 2 ( $P<0.001$ ), and the between-group differences were significant ( $P<0.05$ ). Both treatments also significantly accelerated the decrease in WOMAC pain subscore ( $P<0.001$ ) but had no effect on ESR.

#### 8. Conclusions

Jetongdan treatment improves WOMAC score and ESR score. Failure to demonstrate improvement in pain and stiffness is attributed to between-group differences in baseline characteristics. Further study using a larger sample is recommended.

#### 9. Safety assessment in the article

Jetongdan treatment had no adverse effect on kidney and liver function:

#### 10. Abstractor's comments

This randomized, double-blind study evaluates the efficacy and safety of Jetongdan in patients with osteoarthritis. However, there was a significant between-group difference in pretreatment WOMAC scores ( $48.3\pm 12.8$  [Arm 1] vs.  $56.3\pm 16.7$  [Arm 2],  $P=0.038$ ) indicating bias due to inadequate randomization. The contents and formulation were not described, and the reasons for the change in number of subjects included for analysis was not provided. P-values but not the WOMAC scores and changes in ESR were presented. Jetongdan treatment was not individualized, so the result of this study is difficult to apply realistically in clinical settings.

#### 11. Abstractor and date

Kim JI, 28 June 2010.



### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Seo BK, Ryu SR, Kang JW, et al. Effects of Jetongdan on the quality of life in patients with osteoarthritis of knee. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2005; 22(6): 219–28 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effect of Jetongdan on the quality of life in patients with knee osteoarthritis.

#### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

#### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

#### 4. Participants

Knee osteoarthritis patients (n=80).

#### 5. Intervention

Arm 1: Jetongdan treatment, 3 capsules per dosage, 3 doses a day for 8 weeks (n=40).

Arm 2: Placebo treatment on the same schedule as in Arm 1 (n=40).

Among 80 subjects enrolled, 28 subjects dropped out during the study (15 in Arm 1, 13 in Arm 2).

#### 6. Main outcome measures

Scores on the Korean Health Assessment Questionnaire (KHAQ), Lequesne's Functional Index (LFI), and pain measured on a visual analogue scale (VAS).

Measurements were taken before treatment, and at 4 weeks and 8 weeks after treatment.

#### 7. Main results

Treatment in Arm 1 resulted in a significantly greater decrease in overall KHAQ score (from  $33.0 \pm 5.8$  before to  $27.6 \pm 4.0$  after 8 weeks of treatment,  $P < 0.000$ ), hygiene subscore (from  $4.7 \pm 1.3$  to  $3.8 \pm 0.8$ ,  $P = 0.006$ ), and activities subscore (from  $6.5 \pm 1.3$  to  $5.2 \pm 0.9$ ,  $P = 0.001$ ). However, treatment had no effect on LFI and pain VAS scores.

#### 8. Conclusions

Jetongdan improves the quality of life in patients with knee osteoarthritis.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

This study is part of the study described by abstract K050013H (Seo BK, et al. Clinical study of the efficacy and safety of Jetongdan on patients with osteoarthritis of the knee. *Daehan-Hanui-Hakhoeji [Journal of Korean Oriental Medical Society]* 2005; 26(2): 231–40). According to the original paper, the study enrolled 80 people, but group allocation and reasons for the withdrawal of 28 subjects are not described. The drop-out rate (35%) is very high.

#### 11. Abstractor and date

Kim JI, 3 June 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Lee HJ, Park HJ, Chae YB, et al. Tai Chi Qigong for the quality of life of patients with knee osteoarthritis: a pilot, randomized, waiting list controlled trial. *Clinical Rehabilitation* 2009; 23(6): 504–11.

#### 1. Objectives

To evaluate the effect of Tai Chi Qigong (太極氣功) on the quality of life of patients with knee osteoarthritis.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

HwaSeong City Health Center, Republic of Korea.

#### 4. Participants

Patients diagnosed with knee osteoarthritis defined as over grade II on the Kellgren-Lawrence Scale (n=44).

#### 5. Intervention

Computer-generated balanced block randomization was used for a 2:1 (Arm 1:Arm 2) allocation of participants.

Arm 1: Tai Chi Qigong treatment (n=29)

Arm 2: Just observation (n=15)

Tai Chi Qigong treatment: twice a week, 18 movements per round (1 hour) for 8 weeks (total 16 rounds).

Among 44 subjects enrolled, 3 subjects dropped out (1 in Arm 1, 2 in Arm 2).

Reasons for dropping out: conflict with professional activities (n=1), move to another place (n=1), no reason (n=1).

#### 6. Main outcome measures

Health status (Short Form 36 [SF-36] score); physical functioning (Western Ontario and McMaster Universities Osteoarthritis Index [WOMAC] score, elapsed time to walk 6 meters). Pretreatment measures were compared to posttreatment measures.

#### 7. Main results

Treatment significantly increased overall SF-36 score in Arm 1 compared to Arm 2 ( $64.4 \pm 20.9$  vs.  $55.1 \pm 17.5$ ,  $P=0.010$ ), as well as the mental ( $P=0.018$ ) and physical ( $P=0.030$ ) subscores, and significantly decreased the WOMAC pain subscore ( $-2.2 \pm 4.1$  vs.  $0.2 \pm 1.8$ ,  $P=0.030$ ) and walking time ( $5.9 \pm 1.0$  vs.  $6.7 \pm 1.8$ ,  $P=0.005$ ). However, there was no significant between-group difference in overall WOMAC score ( $20.8 \pm 18.7$  vs.  $28.5 \pm 19.6$ ,  $P=0.086$ ).

#### 8. Conclusions

Eight weeks of Tai Chi Qigong helps relieve symptoms and improves quality of life in patients with knee osteoarthritis.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

The study process as well as the number of drop-outs and reasons for dropping out were clearly described in a flowchart. Moreover, intent-to treat analysis was used to obtain an unbiased estimate of treatment efficacy. There was no blinding in this study, which is a limitation, due to the characteristics of the Tai Chi Qigong treatment. The SF-36 scores and 6-m walking time (but not WOMAC score) provided clear evidence of improvement.

#### 11. Abstractor and date

Kim JI, 24 June 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Yu SM, Lee JY, Kwon KR, et al. Comparative study of acupuncture, bee venom acupuncture, and bee venom pharmacopuncture on the treatment of herniation of nucleus pulposus. *Daehan-Chimgu-Hakhojei (Journal of Korean Acupuncture & Moxibustion Society)* 2006; 23(5): 39–54 (in Korean with English abstract).

#### 1. Objectives

To compare the efficacy of acupuncture, bee venom acupuncture, and bee venom pharmacopuncture as treatment for herniation of nucleus pulposus.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Inega Oriental Hospital), Republic of Korea.

#### 4. Participants

Patients with intervertebral disc herniation (age, 20–60; n=37).

#### 5. Intervention

Arm 1: Standard treatment (acupuncture, drug treatment, physiotherapy) (n=15).

Arm 2: Standard treatment + bee venom pharmacopuncture (BVP; n=11).

Arm 3: Standard treatment + bee venom acupuncture (BVA; n=11).

Acupuncture was applied to the Mingmen (GV4, 命門), Yaoyangguan (GV3, 腰陽關), Shenshu (BL23, 腎俞), Qihai (BL24, 氣海俞), Dachangshu (BL25, 大腸俞), Guanyuanshu (BL26, 關元俞), and Huantiao (GB30, 環跳) acupuncture points twice a day (in the morning and afternoon); Houxi (SI3, 後溪), Zusanli (ST36, 足三里), Yanglingquan (GB34, 陽陵泉), and Linggu (靈骨) acupuncture points in the morning; Mingmen (GV4, 命門), Yaoyangguan (GV3, 腰陽關), Naoshu (SI10, 臑俞), Qihai (BL24, 氣海俞), Dachangshu (BL25, 大腸俞), Guanyuanshu (BL 26, 關元俞), and Huantiao (GB30, 環跳) acupuncture points in the afternoon. Depending on the severity of the pain, additional acupuncture would be applied to the kidney JEONGGYEOK(腎正格), liver JEONGGYEOK(肝正格), and gallbladder JEONGGYEOK(膽正格) acupuncture points.

BVP (once a day in the afternoon): Concentration of injected venom increased over time from 1:4000 in 0.1 ml to 1:2000 in 1 ml.

BVA (once a day in the afternoon): The bee venom was placed on the end of each acupuncture needle. No details concerning other drug treatment, physiotherapy, bedside rest were given.

Two patients, who chose surgery instead, withdrew (one subject each in Arm 2 and 3).

#### 6. Main outcome measures

Pain self-assessed on a visual analogue scale (VAS), Oswestry Disability Index (ODI) score assessed before treatment, and after 10, 20, and 30 days of treatment; degree of physical recovery (excellent, good, fair, and poor) as assessed by the Straight Leg Raising Test (SLRT) and range of motion (ROM).

#### 7. Main results

Treatment in all groups relieved pain ( $P<0.05$ ) and significantly improved ODI score ( $P<0.05$ ).

Overall, recovery was either excellent (14.3%, 5 cases), fair (45.7%, 16 cases), or good (40%, 14 cases). Recovery was excellent (0), good (4), and fair (22) in the acupuncture groups, and excellent (3), good (5), and fair (2) in the bee venom acupuncture group, and excellent (2), good (5), and fair (3) in pharmacopuncture group.

#### 8. Conclusions

Bee venom acupuncture (or bee venom pharmacopuncture) with conventional treatment is more effective than acupuncture alone for intervertebral disc herniation.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

The terms 'bee venom acupuncture' and 'bee venom pharmacopuncture' are not generally used. In this study, the method of randomization was not described. Moreover, as the control acupuncture treatment is known to be effective, it is suggested that the study lacks a placebo control.

#### 11. Abstractor and date

Kim JI, 17 June 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Lee SH, Kang MW, Lee H, et al. Effectiveness of bee-venom acupuncture and Ouhyul herbal acupuncture in herniation of nucleus pulposus—comparison with acupuncture therapy only. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2007; 24(5): 197–205 (in Korean with English abstract).

#### 1. Objectives

To compare the efficacy of bee venom acupuncture and Ouhyul herbal acupuncture in patients with herniation of the nucleus pulposus.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Daejeon Orinetal Hospital), Republic of Korea.

#### 4. Participants

Patients with herniation of the nucleus pulposus (n=60).

#### 5. Intervention

Arm 1: Acupuncture (n=20).

Arm 2: Acupuncture + bee venom acupuncture (BVA; n=20).

Arm 3: Acupuncture + Ouhyul herbal acupuncture (n=20).

- 1) BVA: Once every 2 days, 0.1~0.6 cc was injected in the A-si acupuncture point on the lumbar torso.
- 2) Ouhyul herbal acupuncture: About 0.6 cc was injected in the A-si acupuncture point on the lumbar torso (frequency of injection, not mentioned). The Ouhyul herbal acupuncture mixture consisted of Gardeniae Fructus, Corydalis Tuber, Olibanum, Myrrha, Persicae Semen, Paeoniae Radix Rubra, Salviae miltiorrhizae Radix, and Sappan Lignum.

Standard treatment:

- 1) Acupuncture: Twice a day. Near acupuncture point needling in the morning at the Shenshu (BL23, 腎俞), Zhishi (BL52, 志室), Qihai (BL24, 氣海俞), Dachangshu (BL25, 大腸俞), Guanyuanshu (BL26, 關元俞), Yaoyangguan (GV3, 腰陽關), Remote Acupuncture Point Needling in the afternoon on Zulinqi (GB41, 足臨泣), Hegu (LI4, 合谷), Waiguan (TE5, 外關), Kunlun (BL60, 崑崙), Yanglingquan (GB34, 陽陵泉), and Zusanli (ST36, 足三里) acupuncture points.
- 2) Drug treatment: 3 times a day. Whallak-tang (活絡湯) during the early stage, and Sanghwatang Gamibang (雙和湯 加味方) during the late stage.
- 3) Physiotherapy: Hot pack, Interferential Current Therapy, Transcutaneous Electrical Nerve Stimulation, and cupping therapy depending on the needs of the patients

#### 6. Main outcome measures

Pain self-assessed on a visual analogue scale (VAS), clinical evaluation grade (excellent, good, fair, and poor), and score on the straight leg raising test (SLRT).

#### 7. Main results

The among-group difference in pain VAS score was significant after treatment for 5 days (69.5, 76, 57,  $P=0.000$ ) and 7 days (49.5, 60.5, 47.5,  $P=0.047$ ) but not after treatment for 3 days (77, 80, 70.5,  $P=0.114$ ) and 9 days (41.5, 28.5, 36,  $P=0.076$ ). There was a significant between-group difference in the percentage decrease in pain VAS score after treatment for 5 days (30.5%, 23%, 44% in Arms 1, 2, 3, respectively;  $P=0.000$ ) and during treatment between 5 and 9 days (41.9%, 62.3%, 35.6%;  $P=0.04$ ). After 9 days of treatment, the condition of most patients in Arm 2 was fair and the condition of most patients in Arm 3 was good. There was no significant between-group differences in the SLRT score.

#### 8. Conclusions

Ouhyul herbal acupuncture treatment is more effective for intervertebral disc herniation than single acupuncture treatment, but after 5–9 days of treatment, the bee venom acupuncture is the most effective treatment.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

The randomization method was not described. Moreover, no control and no safety assessment were included.

#### 11. Abstractor and date

Kim JI, 1 July 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Kim KT, Song HS. A randomized controlled double blinding study of bee venom acupuncture therapy on sprain of C-spine. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2005; 22(4):189–95 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effect of bee venom acupuncture therapy on C-spine sprain.

#### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

#### 3. Setting

One Oriental hospital (Kyungwon University Orineal Hospital), Republic of Korea.

#### 4. Participants

Patients with C-spine sprain but not radicular pain or organic disease (n=26).

#### 5. Intervention

Arm 1: Bee venom acupuncture + acupuncture (n=13).

Arm 2: Acupuncture (n=13).

Among 26 subjects enrolled, 5 dropped out during the study (3 in Arm 1, 2 in Arm 2).

#### 6. Main outcome measures

Severity of disability self-assessed on a visual analogue scale (VAS) and Neck Disability Index (NDI) score.

#### 7. Main results

Treatment in both groups significantly decreased VAS and NDI scores, but these decreases were greater in Arm 1 than Arm 2.

#### 8. Conclusions

Bee venom acupuncture combined with acupuncture is more effective than acupuncture only for treating C-spine sprain.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

This study was meaningful inasmuch as bee venom acupuncture is used in treating back pain and C-spine sprain. The reasons for withdrawal were described and blinding was used. However, an evaluation of the adverse events of bee venom acupuncture and statement of the exclusion criteria would have improved this study.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Lee KH, Youn HM, Ko WS, et al. Comparison of treatment effects and allergic responses to stiff neck between sweet bee venom and bee venom pharmacopuncture. *Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)* 2008; 11(4): 39–48 (in Korean with English abstract).

#### 1. Objectives

To compare the efficacy and safety of sweet-bee venom and bee venom acupuncture.

#### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

#### 3. Setting

One Oriental hospital (Oriental Medical Hospital of Dongeui Universtiy), Republic of Korea.

#### 4. Participants

Patients with stiff neck (n=41).

#### 5. Intervention

Arm 1: Cupping therapy (附缸療法) + bee venom (BV) acupuncture + conventional acupuncture. (n=21)

Arm 2: Cupping therapy (附缸療法) + sweet bee venom (SBV) acupuncture + conventional acupuncture. (n=20)

#### 6. Main outcome measures

Stiff neck severity self-assessed on a visual analogue scale (VAS), Neck Disability Index (NDI) score, Clinical Evaluation Grade (CEG), allergic reaction assessed on a VAS.

#### 7. Main results

Stiff neck severity VAS score, NDI score, and CEG decreased significantly regardless of treatment, and there were no significant between-group difference in these decreases. The severity of treatment-site edema and itching were significantly less in Arm 2 than Arm 1.

#### 8. Conclusions

Sweet bee venom acupuncture and bee venom acupuncture both have similar efficacy for stiff neck, and both are relatively safe (i.e., trigger only weak allergic reactions).

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

This study evaluated the efficacy and safety of bee venom acupuncture for stiff neck. As the enrollment procedure was clear and blinding was satisfactory, the results of this study result could be used to guide the choice between BV and SBV for acupuncture. However, the method used to evaluate allergic reaction severity was too subjective and it remains questionable whether the effect of general acupuncture and cupping therapy was greater than the effect of SBV and BVA.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Ryu HS, Jeon SH, Park DS, et al. Clinical study for Chuna treatment on neck pain patient with hypolordotic cervical spine. *Cheokchu-Singyeong-Chuna-Ui-Hakhoeji (The Journal of Korea Chuna Manual Medicine for Spine and Nerves)* 2006; 1(2): 11–20 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effect of Chuna treatment on neck pain in patients with hypolordotic cervical spine.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Chuncheon Oriental Hospital), Republic of Korea.

#### 4. Participants

Neck pain patients with hypolordotic cervical spine (n=20).

#### 5. Intervention

Arm 1: Acupuncture + Chuna treatment (n=10).

Arm 2: Acupuncture only (n=10).

#### 6. Main outcome measures

Pain self-assessed on a visual analogue scale (VAS), change in cervical curvature.

#### 7. Main results

There was a statistically significant between-group difference in VAS score after 3 and 5 rounds of treatment. There was no statistically significant between-group difference in the rate of recovery from cervical lordosis after 5 rounds of treatment.

#### 8. Conclusions

Chuna treatment combined with acupuncture is more effective than acupuncture only for neck pain in patients with hypolordotic cervical spine. However, short-term Chuna treatment does not promote the recovery of the hypolordotic cervical spine.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

This study evaluated the effectiveness of Chuna treatment for neck pain. This study was meaningful insofar as efficacy was objectively evaluated using radiological criteria. Although the hypolordotic cervical spine was not improved, treatment resulted in pain relief. However, the randomization method was improper.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Jung EY, Na SS, Lee KN. Clinical effect of Gigong therapy by measuring ABR-2000 on neck stiffness patients. *Daehan-Uilyo-Gigong-Hakhoeji (Journal of Korean Academy of Medical Gigong)* 2003; 7(1): 61–76 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effect of Gigong therapy (氣功外氣療法) on neck stiffness measured by ABR-2000.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Wolgol Korean Clinic), Republic of Korea.

#### 4. Participants

Patients with neck stiffness (age= over 18 years, n=22).

#### 5. Intervention

Arm 1: Hand acupuncture treatment followed by Gigong therapy, flaming cupping therapy, and Gigong-flaming cupping therapy, and Gigong-manual remedy therapy (n=11).

Arm 2: Hand acupuncture cupping therapy (n=11).

#### 6. Main Outcome Measures

Stress measured by stress analyzer ABR-2000 (Meridian Co., Ltd., Seoul, Korea).

#### 7. Main Results

Treatment eliminated chronic symptoms sooner and had a greater effect on regulation and activity subscores in Arm 1 than Arm 2.

#### 8. Conclusions

Gigong therapy acts on the autonomic nervous system and reduces strain.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

This study showed that adding Gigong therapy to general acupuncture and cupping therapy improves their effect on neck stiffness. The effect of Gigong therapy was impressive, but use of ABR-2000 to evaluate the effect is questionable.

#### 11. Abstractor and date

Nam HJ, 21 August 2010.



### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Lee TH, Hwang HS, Chang SY, et al. The comparison of effectiveness between bee venom and sweet bee venom therapy on low back pain with radiating pain. *Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)* 2007; 10(3): 85–9 (in Korean with English abstract).

#### 1. Objectives

To compare the effect of sweet bee venom acupuncture and bee venom acupuncture on low back pain with radiating pain.

#### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

#### 3. Setting

One Oriental hospital (Semyung University Oriental Medicine Hospital at Chungju), Republic of Korea.

#### 4. Participants

Patients with low back pain with radiating pain (n=24).

#### 5. Intervention

Arm 1: Sweet bee venom (SBV) acupuncture + conventional acupuncture (n=14).

Arm 2: Bee venom (BV) acupuncture + conventional acupuncture (n=10).

#### 6. Main outcome measures

Pain self-assessed on a visual analogue scale (VAS) and functional change assessed by the straight leg raising test (SLRT).

#### 7. Main results

Both treatments resulted in similar levels of pain relief and functional improvement.

#### 8. Conclusions

Sweet bee venom acupuncture and bee venom acupuncture have similar efficacy for low back pain with radiating pain.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

Blinding and randomization were well maintained. However, issues including informed consent and verification of the side effects were insufficiently addressed. Initial values were thought to be close to normal, and no statistically meaningful results were obtained.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Cho JH, Chung SH, Kim SS. The effect of Dong-Si acupuncture point on the meridian muscle tension of the governor vessel and bladder meridian. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2006; 16(3): 83–92 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effect of Dong-Si (董氏) acupuncture point stimulation on meridian muscle tension.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

#### 4. Participants

Healthy subjects (n=30).

#### 5. Intervention

Arm 1: Dong-Si acupuncture at the Linggu (靈骨) and Dabai (大白) acupuncture points + standing up-right for 5 minutes (n=15).

Arm 2: Standing up-right for 5 minutes (n=15).

#### 6. Main outcome measures

Tension of the hamstring determined by the Finger to Floor Method (FFM) and of the erector spinae determined by Back Distance Method (BDM), and muscle tension determined by meridian electromyography (MEMG).

#### 7. Main results

Treatment significantly decreased hamstring tension ( $P=0.001$ ) but not erector spinae tension in Arm 1 compared with Arm 2. Moreover, MEMG showed significantly decreased muscle tension in Arm 1 compared to Arm 2 ( $P=0.002$  Lt,  $0.003$  Rt).

#### 8. Conclusions

The Dong-Si acupuncture at the Linggu and Dabai acupuncture points decreases meridian muscle tension.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

This study evaluated the practical use of the Dong-Si acupuncture points (Linggu, Dabai) and was meaningful insofar as electromyography was used to evaluate the effect. Unfortunately, the finger to floor test was used for evaluating hamstring tension. Moreover, the inclusion criteria were not definite, so the number of volunteers and drop-out subjects was not mentioned. Institutional Review Board (IRB) regulations regarding inclusion of subjects should be followed.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Kwon YD, Lee SG, Lee CW, et al. The short-term efficacy of acupuncture for chronic low back pain: Randomized sham controlled trial. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2007; 17(2): 123–32 (in Korean with English abstract).

#### 1. Objectives

To evaluate the efficacy of acupuncture for chronic low back pain.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Oriental Medical Hospital at Gwangju, Wonkwang University), Republic of Korea.

#### 4. Participants

Patients with chronic low back pain over 3 months (n=50).

#### 5. Intervention

Arm 1: Manual acupuncture (n=25).

Arm 2: Sham acupuncture (n=25).

Fourteen needles were inserted into the meridian points (Arm 1) or non-meridian points (Arm 2) and retained for 20 minutes.

#### 6. Main outcome measures

Pain rated on a visual analogue scale (VAS), Roland Disability Questionnaire (RDQ) score, Patient Global Assessment (PGA) score, and digital temperature by thermography (DT).

#### 7. Main results

Pain relief was significant (VAS score was significantly decreased) in Arm 1 after 2 and 4 weeks of treatment and in Arm 2 after 4 weeks of treatment ( $P<0.05$ ). RDQ score was decreased in both arms, though not significantly. There was no significant between-group difference in VAS and RDQ and no significant between-group difference in DT and PGA score over the course of treatment.

#### 8. Conclusions

Short-term manual acupuncture is an effective and safe treatment for chronic low back pain. Sham acupuncture appears to be equally effective and safe.

#### 9. Safety assessment in the article

Three subjects complained of fatigue (n=1 [Arm 1], n=2 [Arm 2]). There were no serious adverse events.

#### 10. Abstractor's comments

Several types of sham acupuncture have been developed, but the sham control used in this study is an obstacle to evaluating the effect of acupuncture. No difference between real acupuncture and sham acupuncture was found. Other studies have also reported that sham acupuncture and real acupuncture have similar effectiveness. To understand the reason for this result, a study should be conducted to determine whether this lack of a difference is due to a design problem, small number of subjects, or other variables.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Kim KH, Lim HH, Hwang HS, et al. The study of effect and safety related to Dong-gi acupuncture (DGA) and complex therapy on lumbago due to blood stasis and sprain. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2002; 19(3): 107–14 (in Korean with English abstract).

#### 1. Objectives

To evaluate the safety and efficacy of Dong-gi (動氣) acupuncture (DGA) for lumbago due to blood stasis and sprain.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

#### 4. Participants

Patients with lumbago due to blood stasis and sprain (n=97).

#### 5. Intervention

Arm 1: Active Dong-gi acupuncture (DGA) + Drug treatment + Physiotherapy (n=37).

Arm 2: Passive Dong-gi acupuncture (DGA) + Drug treatment + Physiotherapy (n=15).

Arm 3: Simple acupuncture + Drug treatment + Physiotherapy (n=45).

The low back and hip joint in DGA groups were flexed or extended actively or passively (by machine) during acupuncture treatment.

Acupuncture needles were applied to local acupuncture points in the low back area plus BL40, BL65 in Arm 3.

In all patients, herbal medicines and physical therapy were prescribed according to their symptoms.

#### 6. Main Outcome Measures

Severity of pain and range of motion rated as either excellent, good, fair, or bad; levels of serum glutamic oxaloacetic transaminase (SGOT), serum glutamic pyruvic transaminase (SGPT), gamma-glutamyl transpeptidase (gamma-GTP), blood urea nitrogen (BUN), and serum creatinine.

#### 7. Main Results

Active DGA, passive DGA, and simple acupuncture reduced severity of pain and increased range of motion in 97%, 87%, 89% of patients, respectively. In no case did the severity of pain increase, or the range of motion decrease, between the first and final examinations. Blood tests in 34 subjects revealed no change SGOT, SGPT, and gamma-GTP levels in 33 subjects, abnormally high SGOT, SGPT, and gamma-GTP levels at the first visit in only 1 subject, and no significant change in BUN and creatinine levels in all 34 subjects.

#### 8. Conclusions

Combined treatment with Dong-gi acupuncture is effective and safe for lumbago due to blood stasis and sprain.

#### 9. Safety assessment in the article

There was no adverse effect on pain, range of motion, and liver and kidney function during treatment.

#### 10. Abstractor's comments

In this study, lumbago was limited to lumbago due to blood stasis and sprain. Moreover, the criteria, source of pain, and how range of motion was measured were not defined. Randomization is not mentioned specifically. But liver and kidney function (which is not generally evaluated in acupuncture studies) had an important role in this study.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Jung MS. Effectiveness of herbal acupuncture of Carthami semen (Honghwa) vs. its cotreatment with spiral taping for the treatment of acute low back pain: A randomized controlled trial. *Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)* 2002; 5(2): 25–38 (in Korean with English abstract).

#### 1. Objectives

To compare the effectiveness of Carthami semen (紅花, Honghwa) herbal acupuncture with that of Carthami semen herbal acupuncture + spiral taping for acute low back pain.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental clinic (Hwang Oriental Clinic), Republic of Korea.

#### 4. Participants

Patients with acute low back pain and without a history of pain during the last 6 weeks (n=103).

#### 5. Intervention

Arm 1: Carthami semen (紅花,) herbal acupuncture + spiral taping, hot pack (n=52).

Arm 2: Carthami semen (紅花,) herbal acupuncture + hot pack (n=51).

Herbal acupuncture was applied to 18 meridian points in the low back area twice a week.

Elastic Kinesio tapes were applied to the buttocks, low back, and psoas muscle.

#### 6. Main outcome measures

Pain rated on a visual analogue scale (VAS), range of motion (ROM), Oswestry Disability Index (ODI).

#### 7. Main results

Pain was significantly relieved (VAS score declined) by both treatments at all time points during treatment and 3 months after treatment ( $P<0.05$ ). Both treatments significantly improved ODI (Arm 1,  $P<0.001$ ; Arm 2,  $P<0.005$ ). The improvement in VAS and ROM was significantly greater in Arm 1 than Arm 2 ( $P<0.05$ ), but the improvement in ODI was similar in both groups.

#### 8. Conclusions

Both treatments can be effective for acute low back pain, but the treatment with spiral taping is more effective.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

This study evaluated the effectiveness of Carthami semen herbal acupuncture treatment for acute low back pain. The study design called for an evaluation of the effect of Carthami semen herbal acupuncture + spiral taping, but only the efficacy of Carthami semen herbal acupuncture was evaluated. This study was performed in the clinic. Nevertheless statistical analysis and randomization were well performed. However, issues including informed consent were insufficiently addressed.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Kim KT, Song HS. The effectiveness of bee venom acupuncture therapy on the treatment of sprain of L-spine (a randomized controlled trial; double blinding). *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2005; 22(4): 113–20 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effectiveness of bee venom acupuncture therapy for pain due to sprain of the L-spine.

#### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

#### 3. Setting

One Oriental hospital (Kyungwon University Orineal Hospital), Republic of Korea.

#### 4. Participants

Patients with sprain of the L-spine within 5 days of onset of pain. Patients with neurologic pain and functional lumbar disease were excluded (n=30).

#### 5. Intervention

Arm 1: Bee venom acupuncture + acupuncture (n=13).

Arm 2: Acupuncture + saline acupuncture (n=17).

Acupuncture was applied to low back local acupuncture points 5 times over a 10-day period and retained for 20 minutes each time.

Among 30 subjects enrolled, 6 subjects (2 in Arm 1, 4 in Arm 2) dropped out.

#### 6. Main Outcome Measures

Pain evaluated on a visual analogue scale (VAS), Oswestry Disability Index (ODI).

#### 7. Main Results

A pre- to post-treatment comparison found significant decreases in ODI and VAS score after 5 days of treatment and after 5–10 days of treatment in both groups ( $P<0.01$ ), and after 10 days of treatment in Arm 1 ( $P<0.05$ ).

#### 8. Conclusions

Bee venom acupuncture can be effective for pain due to sprain of the L-spine.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

This study satisfied general requirements of randomized, controlled trials such as randomization, blinding, and inclusion of a control group, and the reasons for withdrawal are given. However, the basis for exclusion of patients with functional lumbar diseases was not explained sufficiently. The improvements in ODI and quality of life index need additional explanation as the study period was short.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Kim JH, Jang SH, Yoon HM, et al. The comparison of effectiveness between bee venom and sweet bee venom therapy on chronic lower back pain. *Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)* 2008; 11(4): 15–24 (in Korean with English abstract).

#### 1. Objectives

To compare the efficacies of sweet bee venom acupuncture and bee venom acupuncture for chronic lower back pain.

#### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

#### 3. Setting

One Oriental hospital (Oriental Medicine Hospital of Dongeui Universtiy), Republic of Korea.

#### 4. Participants

Patients with lower back pain lasting more than 3 months (n=39).

#### 5. Intervention

Arm 1: Sweet bee venom (SBV) acupuncture + dry needle acupuncture (n=20).

Arm 2: Bee venom (BV) acupuncture + dry needle acupuncture (n=19).

#### 6. Main outcome measures

Pain rated on a visual analogue scale (VAS), Oswestry Disability Index (ODI), itching rated on a VAS.

#### 7. Main results

Treatment decreased pain (pain VAS score) and improved physical functioning (decreased ODI score) in both groups, but the decrease and improvement were significantly greater in Arm 1 than in Arm 2. The severity of itching increased with number of treatments in Arm 2, but not in Arm 1. There was a significant between-group difference in itching severity.

#### 8. Conclusions

SBV acupuncture causes less severe allergic skin reactions such as itching, but its efficacy is lower than that of BV acupuncture.

#### 9. Safety assessment in the article

Itching was the only adverse event mentioned.

#### 10. Abstractor's comments

The effectiveness of BV acupuncture is well known, but its adverse effects have not been well studied. In this study, both the effectiveness of BV acupuncture was demonstrated and the adverse events of BV acupuncture and SBV acupuncture were compared. Since SBV reduces pain and is associated with less severe adverse events, it should be considered the method of choice.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Song SC, Jung DU, Yeo KC, et al. A study on the effectiveness and relation of the Sacro Occipital technique blocking with acupuncture treatment. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2008; 25(2): 27–40 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effect of concurrent treatment with Sacro Occipital technique (SOT) and conventional acupuncture on lower back pain and physical functioning.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (National Medical Center), Republic of Korea.

#### 4. Participants

Patients with lower back pain (n=72).

#### 5. Intervention

Arm 1: Category 1 treatment + acupuncture (n=13).

Arm 2: Category 2 treatment + acupuncture (n=24).

Arm 3: Category 3 treatment + acupuncture (n=19).

Arm 4: Acupuncture (n=16).

The application of SOT blocks was determined from the results of posture analysis.

Category is determined according to the individual structural characteristics of the pelvis and leg length in osteopathy.

Acupuncture needle application was not described in detail.

#### 6. Main outcome measures

Pain rated on a visual analogue scale (VAS), Oswestry Disability Index (ODI).

#### 7. Main results

Treatments in Arm 2 and Arm 3 were more effective than in Arm 4 between the first and second sessions. The improvement in physical functioning (ODI score) was significant between the first and third sessions in Arm 2, but not in Arm 3. There were no between-group differences in pain relief (pain VAS score).

#### 8. Conclusions

SOT blocking concomitant with acupuncture showed efficacy in patients receiving category 2 treatment.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

This study evaluated the effectiveness of SOT block therapy for lower back pain and physical functioning. SOT block therapy was used with categorization. The division of participants into 4 groups was complicated and the number of subjects in each group was small. Better results could be obtained if categories 2 and 3 were studied first.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.



### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Yang JH, Han SC, Oh RS, et al. A clinical study of the effects of KamiWoosul-tang on low back pain and kidney function. *Daehan-Hanui-Hakhoeji (Journal of Korean Oriental Medical Society)* 2000; 21(4): 216–26 (in Korean with English abstract).

#### 1. Objectives

To evaluate the nephrotoxicity of Kami Woosul-tang (加味牛膝湯) and its efficacy for low back pain.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Oriental Medical Hospital at Jeonju, Wonkwang University), Republic of Korea.

#### 4. Participants

Patients with low back pain (n=64).

#### 5. Intervention

Arm 1: KamiWoosul-tang (加味牛膝湯) treatment (n=32).

Arm 2: OhJeokSan (五積散) treatment (n=16).

Arm 3: Dokhwalkisaeng-tang (獨活寄生湯) treatment (n=16).

Three times a day for 3 weeks.

1) Bedside rest

2) Acupuncture treatment at the Yaoyangguan (GV3, 腰陽關), Dachangshu (BL25, 大腸俞), Guanyuanshu (BL26, 闕元俞), Huantiao (GB30, 環跳), Shenshu (BL23, 腎俞), Zhishi (BL52, 志室), Weizhong (BL40, 委中), Kunlun (BL60, 崑崙), and Taixi (KI3, 太溪) acupuncture points. According to the symptoms, acupuncture points were added or subtracted, and other pain therapies (cupping therapy and venipuncture) were used simultaneously.

3) Physiotherapy: Interferential Current Stimulation therapy, ultrasound therapy, pelvic traction.

4) Injection of Western drugs: Restricted in most cases, but in others, nonsteroidal anti-inflammatory drugs were injected intramuscularly.

#### 6. Main outcome measures

Low back pain self-assessed on a visual analog scale (VAS) and renal function (blood urea nitrogen [BUN], creatinine (Cr), urine test, blood electrolyte concentration).

#### 7. Main results

Treatment in Arm 1 significantly reduced low back pain compared to Arm 2 + Arm 3 during the entire course (1 week, 7.25±1.05 vs. 8.36±1.62; 2 weeks, 5.21±1.52 vs. 7.15±2.56; 3 weeks, 4.10±1.77 vs. 6.50±3.44;  $P<0.05$ ).

#### 8. Conclusions

KamiWoosul-tang is more effective than the conventional treatment methods, OhJeokSan and Dokhwalkisaeng-tang. Moreover, it is not nephrotoxic even after long term use.

#### 9. Safety assessment in the article

No adverse events occurred. The BUN was within normal range (8–20 mg/dl) on hospitalization (14.7±4.0), after 1 week of treatment (13.6±3.9), 2 weeks of treatment (13.5±3.0), and 3 weeks of treatment (13.3±3.7) ( $P<0.05$ ). The creatinine was within normal range (0.7–1.4 mg/dl) on hospitalization (0.76±0.19), after 1 week of treatment (0.77±0.19), 2 weeks of treatment (0.82±0.21), and 3 weeks of treatment (0.87±0.21) ( $P<0.05$ ).

There was no abnormal change in microscopic and chemical urine analysis during 3 weeks.

#### 10. Abstractor's comments

The conclusion of this study was that KamiWoosul-tang was more effective than conventional treatment methods for low back pain. However, because of its design, the study could not confirm the efficacy of OhJeokSan and Dokhwalkisaeng-tang. Moreover, the causes of low back pain in the subject group were heterogeneous (herniation of intervertebral disk, acute or chronic lumbar sprain, and spinal stenosis), and clinical applicability was unclear because each patient was also receiving additional treatment (i.e., acupuncture or Western medicine).

#### 11. Abstractor and date

Kim JI, 5 July 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Ko YJ, Lee RM, Kim JG, et al. The clinical study on effects of Moxa-pellet therapy in chronic low back pain patients. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2007; 24(3): 187–96 (in Korean with English abstract).

#### 1. Objectives

To evaluate the efficacy of moxa-pellet therapy for chronic lower back pain.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

#### 4. Participants

Patients with chronic lower back pain for more than 3 months (n=61).

#### 5. Intervention

Arm 1: Moxa-pellet.

Arm 2: Sham moxa-pellet.

Arm 3: Adhesive sheet only.

Among 61 subjects enrolled, 21 subjects dropped out of the study.

#### 6. Main outcome measures

Pain assessed on a visual analogue scale (VAS), Short Form McGill Pain Questionnaire (SF-MPQ) score, 36-Item Short Form Health Survey (SF-36) score.

#### 7. Main results

Treatment significantly decreased pain VAS score in Arm 1 and Arm 2 but not in Arm 3.

However, treatment significantly decreased SF-MPQ score only in Arm 1, but not Arm 2 and Arm 3.

Treatment also resulted in significantly improved scores for Physical Function (PF), Role-Emotional (RE), Mental Health (MH), and Bodily Pain (BP) in Arm 1, and for BP only in Arm 3, but not for all subscales in Arm 2. The only significant among-group difference was in physical function (PF) ( $P=0.03$ ).

#### 8. Conclusions

The moxa-pellet treatment relieves pain and improves quality of life in patients with chronic lower back pain.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

The moxa-pellet is not a traditional treatment in Oriental medicine clinics, but acupuncture point stimulation and delivering active ingredients are common treatment options. The randomization and grouping of subjects in this study were well described. If the success of single-blinding was assessed after treatment, the quality of this study was raised. However, the reasons for withdrawal should be stated and it should be noted that quality of life cannot be easily improved within 4 weeks of treatment.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Lee SH, Cheong BS, Yun HS, et al. Therapeutic effect of Weizhong (BL40) venepuncture on low back pain. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2002; 19(1): 65–75 (in Korean with English abstract).

#### 1. Objectives

To evaluate the therapeutic effect of Weizhong (BL40, 委中) venepuncture on low back pain.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (National Medical Center), Republic of Korea.

#### 4. Participants

Patients with low back pain who visited the hospital (n=46).

#### 5. Intervention

Arm 1: Weizhong (BL40, 委中) venepuncture + acupuncture treatment (n=25).

Arm 2: Acupuncture treatment (n=21).

Acupuncture needles were inserted into the low back local acupuncture points once and retained for 20 minutes.

#### 6. Main Outcome Measures

Pain rating score (PRS).

#### 7. Main Results

PRS (as well as subscores for pain intensity, duration, frequency, and aggravation) were significantly improved by treatment in both arms, and the improvement was significantly greater in patients with an exposed vessel around the Weizhong (BL40) than patients without this exposed vessel. This result suggests that the exposed vessel around the Weizhong (BL40) may be an important indication for venepuncture.

#### 8. Conclusions

Weizhong (BL40) venepuncture is effective for low back pain in patients with an exposed vessel around the Weizhong (BL40), i.e., in the popliteal area.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

Weizhong (BL40) venepuncture has been widely used to treat low back pain in traditional Korean medicine, but few studies have demonstrated its efficacy. This study fails to meet certain requirements of clinical trials such as randomization, and use of inclusion and exclusion criteria. Moreover, adverse events are not mentioned, though adverse events related to venepuncture are known.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Choi SH, Ko KM, Kim KW, et al. The effects of spiral taping therapy—a randomisation controlled trial. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2006; 23(2): 165–72 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effect of spiral taping therapy on low back pain or neck pain.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Daegu Oriental Hospital of Daegu Hanny University), Republic of Korea.

#### 4. Participants

Patients with low back pain or neck pain (n=26).

#### 5. Intervention

Arm 1: Spiral taping treatment (n=14).

Arm 2: Acupuncture treatment (n=12).

Among 26 subjects, 5 subjects (3 in Arm 1, 2 in Arm 2) dropped out during the study.

Acupuncture was applied to low back local acupuncture points in 6 sessions, two sessions per week, for 15 minutes per session.

#### 6. Main Outcome Measures

Pressure pain threshold, pain assessed on a visual analog scale (VAS), range of motion (ROM).

#### 7. Main Results

There were significant between-group differences in pressure pain threshold ( $P<0.01$ ) and pain VAS ( $P=0.003$ ), but not in ROM. The increase in pressure pain threshold at the affected site and decrease in pain VAS were greater in Arm 1 than Arm 2.

#### 8. Conclusions

The spiral taping therapy is effective for low back pain or neck pain.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

Many studies have evaluated the efficacy of traditional medicine for low back pain or neck pain. The evaluation in this study was limited to subjective measures (VAS, ODI). The objectiveness of this study was increased by its use of pressure pain threshold. The study used proper inclusion-exclusion criteria, methods of grouping and randomization, but failed to mention ethical considerations such as informed consent. It is hoped that more articles are published in English to communicate the results widely.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Lee JW, Kim CH, Moon SH, et al. Effectiveness of spiral taping in the low back pain patients. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2006; 23(5): 1–10 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effect of spiral taping in the low back pain patients.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Oriental Medical Hospital at Jeonju, Woosuk University), Republic of Korea.

#### 4. Participants

Low back pain patients (n=60).

#### 5. Intervention

Arm 1: Spiral taping + moxibustion + cupping therapy + physical therapy (n=30).

Arm 2: Moxibustion + cupping therapy + physical therapy (n=30).

3X4 spiral tapes were applied at 10 points a total of 3 times during 1 week.

#### 6. Main outcome measures

Pain rated on a visual analogue scale (VAS), Lumbar flexion angle, Oswestry Disability Index (ODI).

#### 7. Main results

Decreases in VAS score ( $P<0.0001$ ) and ODI score ( $P<0.0001$ ) and increase in lumbar flexion angle ( $P=0.008$ ) were significantly greater in Arm 1 than Arm 2 after the first and second treatments but were similar in both groups after the third treatment.

#### 8. Conclusions

Spiral taping therapy accelerates recovery from low back pain.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

This study evaluated the efficacy of spiral taping for low back pain. The O-ring test was used as an inclusion criterion but its accuracy has never been sufficiently verified by scientific evidence. Moreover, the study design could have been improved by including an assessment of itch and flare in the skin.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Kim CY, Kwon NH, Shin YJ, et al. Randomized controlled trial: Effect of master Dong's acupuncture in chronic shoulder pain patients. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2007; 24(6): 89–96 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effect of Dong's acupuncture on chronic shoulder pain.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

#### 4. Participants

Office workers who performed more than 3 hours of computer work a day and complained of chronic shoulder pain (n=40, age: 20–60 years).

#### 5. Intervention

Arm 1: Dong's acupuncture (n=20).

Arm 2: No treatment (self-administered exercise only) (n=20).

Yangxi (LI15, 陽谿), Jianliao (TE14, 肩髃), and Jianjing (GB21, 肩井) on the affected side and Dong's acupuncture points Gyun-joong (肩中) and Shin-guan (腎關) on the non-affected side were used for treatment.

Among 40 subjects enrolled, 4 subjects (2 subjects in each arm) dropped out of the study

#### 6. Main Outcome Measures

Scores on Constant Shoulder Assessment (CSA), Shoulder Pain and Disability Index (SPADI), pain evaluated on a visual analogue scale (VAS).

#### 7. Main Results

CSA, SPADI, and VAS scores were significantly improved with treatment for 4 weeks in Arm 1 ( $P<0.05$ ), and only the CSA score was significantly improved without treatment in Arm 2 ( $P<0.05$ ).

The improvement in CSA and SPADI scores after 4 weeks of treatment was significantly greater in Arm 1 than Arm 2 ( $P<0.05$ ).

#### 8. Conclusions

Dong's acupuncture for 4 weeks improves shoulder pain and disability.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

This study evaluated the effect of Dong's acupuncture on chronic shoulder pain in office workers who have lots of mental stress. The randomization method and inclusion criteria were properly described, but reasons for patient withdrawal early in the trial should have been included with the description of the statistical analysis.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Nam DW, Choi YS, Kim HB, et al. Randomized controlled trial of East-West collaborative medical treatment on female chronic shoulder pain patients. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2007; 24(6): 113–22 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effectiveness of combinations of Eastern-Western medical treatments for chronic shoulder pain.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

#### 4. Participants

Patients with chronic shoulder pain (n=60). Patients were randomly assigned.

#### 5. Intervention

Arm 1: (Eastern-Western combined treatment; EW): Acupuncture treatment + nerve block treatment (n=20).

Arm 2: (Eastern medical treatment only; E): Acupuncture treatment (n=20).

Arm 3: (control group; C): No treatment (n=20).

Suprascapular nerve block (steroid mixed with 1% lidocaine, 5 ml), subacromial injection, and trigger point injection (0.5–2 ml of topical anesthetic) for Western medical treatment.

Yangxi (LI15, 陽谿), Jianliao (TE14, 肩髃), Jianjing (GB21, 肩井), and Dong-si (董氏) acupuncture points (Shin-guan and Gyun-joong) twice a week for 4 weeks in the acupuncture group.

#### 6. Main Outcome Measures

Score on the Constant Shoulder Assessment (CSA), Shoulder Pain and Disability Index (SPADI), and pain assessed on a visual analogue scale (VAS).

#### 7. Main Results

Patients in Arm 1 and Arm 2 showed significant improvement in CSA, SPADI, and VAS ( $P<0.05$ ).

There was a significant difference in CSA, SPADI, and VAS between Arm 1 and Arm 3 ( $P<0.001$ ), and in VAS between Arm 1 and Arm 2 ( $P=0.012$ ).

#### 8. Conclusions

The combined treatment for chronic shoulder pain is significantly more effective.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

The combining of Eastern and Western remedies is an active topic for discussion in medicine. In this study, the effectiveness of combined treatment for chronic shoulder pain is compared with that of Eastern medical treatment and no treatment. The overall study design, randomization, and inclusion criteria were clearly presented, but it is unfortunate that the Eastern treatment was combined with nerve block treatment (the Western treatment).

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Lee SY, Lim JA, Na WM, et al. The study of the Kim sham acupuncture for single blind about the acupuncture points used for treatment of the shoulder pain. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2006; 23(6): 133–43 (in Korean with English abstract).

#### 1. Objectives

To assess the difference in subjective sensation between patients treated with real acupuncture and patients treated with sham acupuncture in a pilot study preceding clinical trials of acupuncture treatment of shoulder pain.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

Two Oriental hospitals (Oriental Medical Hospital at Gwangju, Wonkwang University, and Public Health Center in Hwa-sun), Republic of Korea.

#### 4. Participants

Patients who responded positively to the question “Do you agree to participate in a clinical trial comparing the feeling of real acupuncture with that of Kim sham acupuncture? If you agree, please write down your sex, age, name, and sign the form” (n=60).

#### 5. Intervention

Arm 1: Real acupuncture (n=29).

Arm 2: Kim sham acupuncture (n=31).

Both types of acupuncture needles were applied to local points such as Jianliao (TE14, 肩髃), Jianyu (LI15, 肩髃), and distant points such as Quchi (LI11, 曲池), Zhongzhu (TE3, 中渚), Houxi (SI3, 後谿), and Hegu (LI4, 合谷) once for 30 minutes.

#### 6. Main Outcome Measures

Assessment of the feeling difference between real acupuncture and sham acupuncture.

#### 7. Main Results

Patients were able to distinguish real acupuncture from sham acupuncture treatment ( $P<0.05$ ) when acupuncture points such as Jianliao (TE14), Jianyu (LI15), and Houxi (SI3) were used.

#### 8. Conclusions

In the Kim sham acupuncture treatment, blinding of the Jianliao (TE14), Jianyu (LI15), and Houxi (SI3) acupuncture points is not possible.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

Inclusion of a placebo control group in clinical trials of acupuncture (like clinical trials of medical devices) is difficult. This study was designed to determine whether subjects could discriminate real from sham acupuncture. This findings of this study may have important implications for future clinical trials of acupuncture. In Asian people including Koreans, discrimination of real from sham acupuncture is unimportant. Stratification of subjects based on acupuncture treatment frequency is suggested.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.



### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Nam DW, Kim HB, Yang DH, et al. Comparison research of clinical effect of Eastern and Western medical treatment on frozen shoulder patients. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2006; 23(5): 105–13 (in Korean with English abstract).

#### 1. Objectives

To evaluate the efficacy of combined Eastern-Western medical treatments for frozen shoulder (凍結肩).

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

#### 4. Participants

Patients with shoulder pain for 1–12 months, limited active and passive range of motion, inability to lay on the affected side, and night pain were recruited by newspaper advertisement and by Kyung Hee Oriental Hospital for 4 weeks (n=59).

#### 5. Intervention

Arm 1: Eastern medical treatment (acupuncture) (n=22).

Arm 2: Western medical treatment (nerve block treatment) (n=17).

Arm 3: Eastern-Western combined medical treatment (acupuncture + nerve block) (n=20).

Suprascapular nerve block (steroid mixed with 1% lidocaine 5 ml), subacromial injection, and trigger point injection (0.5 – 2 ml topical anesthetic) for Western treatment.

Jianyu (LI15, 肩髃), Jianliao (TE14, 肩髎), Jianjing (GB21, 肩井), and Dong-si (董氏) acupuncture points (Shin-guan and Gyun-joong) twice a week for 4 weeks in acupuncture group.

#### 6. Main Outcome Measures

Pain evaluated on a visual analogue scale (VAS), and range of motion (ROM) including flexion, extension, abduction, and adduction clinically assessed using a goniometer.

#### 7. Main Results

Treatment decreased pain in all groups (5.67±2.14 in Arm 1, 7.67±1.28 in Arm 3, and 7.73±2.14 in Arm 2). There were significant improvements in abduction, adduction, and flexion, but not extension in Arm 1 and Arm 3 ( $P<0.05$ ), and in adduction, but not abduction, flexion, and extension in Arm 2 ( $P=0.018$ ).

#### 8. Conclusions

All three treatments improve frozen shoulder ROM. The Eastern-Western combined treatment markedly improves abduction.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

In the clinic, pain must be reduced before frozen shoulder ROM can be improved. In this study, acupuncture and nerve block separately or jointly were used as treatment. It is very impressive that the improvement in ROM was observable within one month.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Nam DW, Jung IT, Kim JH, et al. Clinical observation of Western medical treatment and acupuncture treatment on frozen shoulder patients. *Daehan-Chimgu-Hakhojei (Journal of Korean Acupuncture & Moxibustion Society)* 2006; 23(5): 177–85 (in Korean with English abstract).

#### 1. Objectives

To compare the efficacy of Eastern medical treatment with that of Western medical treatment for frozen shoulder.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

#### 4. Participants

Patients with frozen shoulder and shoulder pain. Index cases enrolled in clinical trial (n=39, male/female=16/23).

#### 5. Intervention

Arm 1: Eastern treatment (acupuncture) (n=22).

Arm 2: Western treatment (nerve block) (n=17).

Suprascapular nerve block (steroid mixed with 1% lidocaine 5 ml), subacromial injection, and trigger point injection (0.5 – 2 ml topical anesthetic) for Western treatment.

Jianyu (LI15, 肩髃), Jianliao (TE14, 肩髃), Jianjing (GB21, 肩井), and Dong-si (董氏) acupuncture points (Shin-guan and Gyun-joong) twice a week for 4 weeks in acupuncture group.

#### 6. Main Outcome Measures

Scores on Constant Shoulder Assessment (CSA), Shoulder Pain and Disability Index (SPADI), and pain evaluated on a visual analogue scale (VAS).

#### 7. Main Results

CSA and SPADI scores were significantly improved ( $P<0.05$ ) in both groups, but these improvements were not significantly different between groups. At the end of the trial, pain (VAS) was less in Arm 1 (5.67 vs. 7.73 [Arm 2]).

#### 8. Conclusions

Both treatments are equally effective.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

The development of standard treatment guidelines for each disease is very important. The objective of this study was to compare the efficacy of Eastern with that of Western medical treatment for frozen shoulder. Using these small clinical trials as a basis, it is thought that standard treatment guidelines will be developed in the near future.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Nam DW, Lim S, Kim JI, et al. Clinical observation of acupuncture and nerve block treatment for adhesive capsulitis patients. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society) J Korean Acupuncture and Moxibustion Society* 2007; 24(4): 143–55 (in Korean with English abstract).

#### 1. Objectives

To compare the effectiveness of acupuncture and with that of nerve block treatment for adhesive capsulitis.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

#### 4. Participants

Patients with movement limitation and pain (the major symptoms of adhesive capsulitis) (n=59, male/female=24/ 35).

#### 5. Intervention

Arm 1: Acupuncture (n=22).

Arm 2: Nerve block (n=17).

Arm 3: Acupuncture + Nerve block (n=20).

Suprascapular nerve block (steroid mixed with 1% lidocaine 5 ml), subacromial injection, and trigger point injection (0.5 – 2 ml topical anesthetic) for Western treatment.

Jianyu (LI15, 肩髃), Jianliao (TE14, 肩髎), Jianjing (GB21, 肩井), and Dong-si (董氏) acupuncture points (Shin-guan and Gyun-joong) twice a week for 4 weeks in acupuncture group.

#### 6. Main Outcome Measures

Scores on the Constant Shoulder Assessment (CSA), Shoulder Pain and Disability Index (SPADI), ROM, and pain severity measured on a visual analogue scale (VAS). Digital Infrared Thermographic Imaging (DITI).

#### 7. Main Results

Treatment significantly improved CSA ( $P=0.005$ ), SPADI ( $P=0.012$ ), and VAS scores ( $P=0.007$ ), DITI ( $P=0.007$ ), and adduction ( $P=0.01$ ) and extension ( $P<0.001$ ) ROM in Arm 1; CSA ( $P=0.006$ ), SPADI ( $P=0.037$ ), VAS scores ( $P<0.001$ ), DITI ( $P=0.014$ ), abduction ( $P=0.004$ ) and extension ( $P<0.001$ ) ROM in Arm 2; CSA ( $P<0.001$ ), SPADI ( $P<0.001$ ), and VAS ( $P<0.001$ ) scores and abduction ( $P<0.001$ ), adduction ( $P=0.01$ ), and extension ( $P<0.001$ ) ROM in Arm 3. The improvements in pain severity, CSA score ( $P<0.025$ ), and abduction ROM were significantly greater 4 weeks after treatment in Arm 3 than in Arm 1 or Arm 2.

#### 8. Conclusions

The efficacy of combined treatment for adhesive capsulitis is greater than that of nerve block treatment. This study may be used for treatment model development.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

The studies of Nam et al. (*Daehan-Chimgu-Hakhoeji [Journal of Korean Acupuncture & Moxibustion Society]* 2007; 24(6): 113-22 [K070018\_A], 2006; 23(5): 177-85 [K060015\_A]) and Koh et al. (*Daehan-Hanui-Hakhoeji [J Korean Oriental Medicine]* 2007; 28(1): 11-24) had similar clinical trial designs and objectives, and showed effectiveness of acupuncture and nerve block co-treatment. In clinics using Western medical treatment, when a concomitant therapy is found to be more effective than single drug treatment, it is widely adopted. It is expected that these co-treatments will be adopted.

#### 11. Abstractor and date

Kim HJ, 17 August 2010.

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Hwang DS, Kim YS, Lee KS. Effects of Ultraviolet-B(UV-B) radiation on Calcium, Vitamin D3 and Cholesterol level in postmenopausal women. *Daehan-Hanbang-BuIngwa-Hakhoeji (Journal of Oriental Obstetrics and Gynecology)* 2004; 17(4): 166–73 (in Korean with English abstract).

#### 1. Objectives

To evaluate the effect of Ultraviolet-B (UV-B) on the prevention and course of osteoporosis.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (details not mentioned), Republic of Korea.

#### 4. Participants

Fifty menopausal women who had previously received treatment with steroids, parathyroid hormone, anticonvulsant medication, diuretics, and antacids (all of which could influence bone metabolism) but no treatment with postmenopausal hormone alternative remedies.

The patients were randomized to receive UV-B irradiation plus calcium and UV-B irradiation only. Healthcal (Dong Wha Pharma) was used as a calcium supplement (1500 mg per day).

#### 5. Intervention

Arm 1: Ultraviolet irradiation and calcium supplement in parallel (n=25).

Arm 2: Ultraviolet irradiation only (n=25).

Each participant was exposed to 20 minutes of ultraviolet irradiation once a day at the same time each day.

Three patients (1 in Arm 1, 2 in Arm 2) dropped out.

#### 6. Main outcome measures

Serum levels of calcium, vitamin D3, and total cholesterol.

#### 7. Main results

After 2 weeks of treatment, total cholesterol was significantly decreased, and calcium and vitamin D3 levels were significantly increased in both Arm 1 and Arm 2.

#### 8. Conclusions

Ultraviolet irradiation can help control osteoporosis.

#### 9. Safety assessment in the article

Not mentioned.

#### 10. Abstractor's comments

The application of ultraviolet irradiation was not described precisely. If the focal point of irradiation can be controlled, it might be possible to investigate differences between acupuncture points.

#### 11. Abstractor

Cho JH, 16 July 2010.

## 14. Genitourinary Tract Disorders (including Climacteric Disorders)

### Reference

Lee SH, Lee BC. Electroacupuncture relieves pain in men with chronic prostatitis/chronic pelvic pain syndrome: Three-arm randomized trial. *Urology* 2009; 73: 1036–41.

### 1. Objectives

To evaluate the efficacy of electroacupuncture for chronic pelvic pain.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Thirty-six patients with chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS) (category III) meeting National Institutes of Health (NIH) consensus criteria, poorly responsive to general treatment such as antibiotics and antiinflammatory drugs, NIH-Chronic Prostatitis Symptom Index (NIH-CPSI) total score >15, and 3 months of persistent pain within the last 6 months.

### 5. Intervention

Arm 1: Advised exercise + Electroacupuncture (n=12).

Arm 2: Advised exercise + Sham electroacupuncture (n=12).

Arm 3: Advised exercise only (n=12). Electroacupuncture was performed at the left and right Zhongliao (BL33, 中髎), Ciliao (BL 32, 次髎), and Huantiao (GB30, 環跳) acupuncture points, and sham electroacupuncture was performed at non-acupuncture points 15 mm from the real acupuncture points. The sham acupuncture points were not electrostimulated, but the subjects could hear the sound of electrostimulation.

Among 36 subjects, 4 subjects withdrew because of their inability to comply with the study requirements (1 in Arm 1, 2 in Arm 2, 1 in Arm 3).

### 6. Main Outcome Measures

NIH-CPSI total score, NIH-CPSI subscores for pain severity, urinary symptom, and quality of life (QOL), and levels of prostaglandin E2 and  $\beta$ -endorphin in prostatic fluid after 3 and 6 weeks of treatment.

### 7. Main Results

After 3 weeks of treatment, there was a significant decrease in NIH-CPSI pain severity subscore in Arm 1 and Arm 2 but no significant among-group difference in NIH-CPSI total score. After 6 weeks of treatment, the decreases in NIH-CPSI total score and NIH-CPSI pain severity subscore were significantly greater in Arm 1 than in Arm 2 and Arm 3. There were no significant among-group differences in NIH-CPSI urinary symptom and QOL subscores. Although the mean prostaglandin E2 level in postmassage urine samples decreased in all arms of the study, it decreased significantly in Arm 1 ( $P=0.023$ ).

### 8. Conclusions

The electroacupuncture has therapeutic efficacy for chronic prostatitis and pelvic pain. The effect is related to prostaglandin E2 level.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study verified the efficacy of electroacupuncture for chronic prostatitis and pelvic pain. It is suggested that a similar study on electroacupuncture for chronic pelvic pain in women will be worthwhile.

### 11. Abstractor and date

Cho JH, 16 July 2010.

## 14. Genitourinary Tract Disorders (including Climacteric Disorders)

### Reference

Song MK, Kang JS, Kang CH, et al. The clinical effect of Bosingunyang-tang on chronic non-bacterial prostatitis/chronic pelvic pain syndrome: randomized double-blind, placebo-controlled clinical trial. *Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)* 2008; 29(3): 800–9.

### 1. Objectives

To evaluate the efficacy of Bosingunyang-tang (補腎健陽湯) for pain due to chronic non-bacterial prostatitis.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Male patients (age, 18–50 years) with symptoms for 3–6 months, NIH-Chronic Prostatitis Symptom Index (NIH-CPSI) score >15, and International Prostate Symptom Score (IPSS) >8 (n=27).

### 5. Intervention

Arm 1: Administration of Bosingunyang-tang (補腎健陽湯) extract, 30 minutes after meals, 2.0 g t.i.d. for 6 weeks (n=14).

Arm 2: Administration of placebo, 30 minutes after meals, three times a day for 6 weeks.

### 6. Main Outcome Measures

Scores on the NIH-CPSI and IPAA questionnaires and prostaglandin E2 (PGE2) concentration in prostatic fluid after 3 weeks and 6 weeks of treatment.

### 7. Main Results

After 6 weeks of treatment, the NIH-CPSI total score was 5 points higher in Arm 1 than in Arm 2 and the decrease in NIH-CPSI pain severity subscore was three times greater in Arm 1 than in Arm 2. Patients whose NIH-CPSI pain score improved had reduced PGE2 concentration in prostatic fluid.

### 8. Conclusions

Treatment with Bosingunyang-tang for 6 weeks improves the clinical symptoms of chronic non-bacterial prostatitis/chronic pelvic pain syndrome by decreasing PGE2 concentration in prostatic fluid.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

NIH-CPSI total score is an important measure of disease symptom severity, but it depends on the rate patient participation. The short study period and small number of patients are limitations of this study. If more objective measures of chronic prostatitis/chronic pelvic pain syndrome severity, larger number of patients, and longer study period are applied, better results will be obtained.

### 11. Abstractor and date

Cho JH, 16 July 2010.

## 14. Genitourinary Tract Disorders (including Climacteric Disorders)

### Reference

Youn HM, Kim CH, Park JH, et al. Effect of acupuncture treatment on the primary dysmenorrhea (A study of single blind, sham acupuncture, randomized, controlled clinical trial. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2008; 25(3): 139–54 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of acupuncture treatment on primary dysmenorrhea.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Oriental Medicine Hospital of Dongeui University), Republic of Korea.

### 4. Participants

Eighty patients (age, 18–40 years) with dysmenorrhea, MMP score >5, limitation of daily social activity or personal relationship for more than 1 day within last 6 months. The diagnosis was by a gynecologist in all cases. No analgesics were permitted during the clinical trial.

### 5. Intervention

Acupuncture was applied once on each of menstruation days 7, 8, 9, and 10 of two menstrual periods (8 treatments in total). The observational period began after the 2nd treatment.

Arm 1: Acupuncture treatment based on tonifying method of small intestine in Sa-am acupuncture. (小腸正格: Zulinqi, GB41, 足臨泣; Houxi, SI3, 後谿; Qiangu, SI2, 前谷; Zutonggu, BL66, 足通谷) and deficiency-excess pattern identification (虛實辨證).

Arm 2: Sham acupuncture applied to non-acupuncture points.

Among 80 subjects enrolled, 47 subjects (25 in Arm 1; 22 in Arm 2) completed the study.

### 6. Main Outcome Measures

Scores on the Measure of Menstrual Pain (MMP) and Menstrual Symptom Severity List (MSSL) questionnaires.

### 7. Main Results

Treatment significantly decreased MMP and MSSL scores in Arm 1 and in Arm 2 ( $P < 0.001$ ). The changes in MMP and MSSL scores were larger in Arm 1 than in Arm 2, but not significantly larger.

### 8. Conclusions

Acupuncture treatment may be mildly effective for primary dysmenorrhea.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

During this clinical trial, treatment satisfaction was greater in Arm 1 than in Arm 2. Moreover, treatment efficacy was lower in Arm 1 during the 1st to 3rd measurement. Taken together, these results suggest that acupuncture treatment improves the symptoms of dysmenorrhea. Efficacy increased as treatment duration increased. Thus, continuation of the treatment and management are needed over a longer period.

### 11. Abstractor and date

Cho JH, 16 July 2010.

## 14. Genitourinary Tract Disorders (including Climacteric Disorders)

### Reference

Cho JH, Kim HS, Choi DY, et al. A clinical study on the effect of aroma ceramic moxibustion for primary dysmenorrhea. *Daehan-Hanbang-BuIngwah-Hakhoeji (Journal of Oriental Obstetrics and Gynecology)* 2009; 22(1): 172–81 (in Korean with English abstract).

### 1. Objectives

To evaluate the efficacy of aroma ceramic moxibustion for primary dysmenorrhea.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Patients (age, 18–30 years) with regular menstrual periods every  $28 \pm 3$  days during last 3 months, menstrual pain VAS score  $> 6$ , and analgesics taken over 3 months minimally (n=52).

### 5. Intervention

Moxibustion applied to 7 acupuncture points, i.e., the Qihai (CV6, 氣海), Guanyuan (CV4, 關元), Zhongji (CV3, 中極), and right and left Sanyinjiao (SP6, 三陰交) and Xuanzhong (GB39, 懸鐘) acupuncture points once a day for 8 weeks.

Arm 1: Aroma ceramic moxibustion (n=25).

Arm 2: Aroma Bambusae Caulis in Liguamen sphere (n=27).

Totally 35 subjects completed the study (dropouts: 6 in Arm 1, 11 in Arm2).

### 6. Main Outcome Measures

Menstrual pain intensity measured on a visual analogue scale (VAS) at the initial screening visit and 4 and 8 weeks after treatment. The body temperature measured at the Guanyuan (CV4) and Qihai (CV6) acupuncture points before and after 8 weeks of treatment using infrared thermography.

### 7. Main Results

Treatment significantly decreased menstrual pain in both Arm 1 and Arm 2, and increased body temperature at the Guanyuan (CV4) acupuncture point in both Arm 1 and Arm 2, but there was no significant between-group difference.

### 8. Conclusions

Aroma ceramic moxibustion and aroma moxibustion decrease pain due to primary dysmenorrhea, but the decrease is insignificant.

### 9. Safety assessment in the article

Aspartate aminotransferase (AST), alanine aminotransferase (ALT), blood urea nitrogen (BUN), and creatinine levels, complete blood count (CBC), and kidney function tests were normal in every subject before and after treatment. No adverse events were reported during the clinical trial.

### 10. Abstractor's comments

This study compared the efficacies of aroma ceramic moxibustion and aroma bambusae caulis in liquamen sphere for menstrual pain. Moxibustion had an efficacy for menstrual pain, and both treatments had similar efficacy. During the trial, 17 subjects withdrew because of the discomfort of daily moxibustion at 7 acupuncture points. As moxibustion was performed without supervision and in the absence of the doctor, this should be corrected to improve the accuracy of results.

### 11. Abstractor and date

Cho JH, 16 July 2010.



## 14. Genitourinary Tract Disorders (including Climacteric Disorders)

### Reference

Jang JB, Yoon YJ, Park JH, et al. Therapeutic effects of chiljehyangbuhwan on primary dysmenorrhea: A randomized, double blind, placebo-controlled study. *Complementary Therapies in Medicine* 2009; 17; 123–30.

### 1. Objectives

To evaluate the efficacy of Chiljehyangbuhwan (七製香附丸) on primary dysmenorrhea.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Patients (age, 14–45 years) with active menstrual pain (not due to secondary dysmenorrhea, not related to conditions causing pelvic pain outside the uterus, and not related to drug interactions) (n=100).

### 5. Intervention

Arm 1: Chiljehyangbuhwan (七製香附丸) treatment, 3 times a day, 30 minutes after meals, for one menstrual cycle.

Arm 2: Placebo drug treatment, 3 times a day, 30 minutes after meals, for one menstrual cycle.

After eliminating 29 subjects who were lost to follow up and/or who showed adverse drug reactions, a total of 71 subjects (34 in the Chiljehyangbuhwan group and 37 in the placebo group) completed the study.

### 6. Main Outcome Measures

Menstrual pain severity evaluated on a unidimensional scales (visual analogue scale [VAS] and verbal rating scale [VRS]) and multidimensional scales (multi-dimensional VRS [MVRS]).

### 7. Main Results

Treatment significantly decreased pain (decreased VAS, VRS, and MVRS scores) in both arms, but the decrease was significantly greater in Arm 1. Neither treatment affected the results of blood analysis, hepatic and kidney function tests.

### 8. Conclusions

Chiljehyangbuhwan significantly decreases pain due to dysmenorrhea.

### 9. Safety assessment in the article

The safety of the Chiljehyangbuhwan preparation was evaluated on the basis of liver function tests, urine analysis, complete blood counts, and pelvic ultrasound. All tests were normal. Adverse reactions were recorded on observation charts, and while 8 in the Chiljehyangbuhwan group reported various forms of discomfort, most symptoms were mild and subsided within 2–3 days and none of the subjects chose to withdraw from the trial for these reasons. The 2 subjects who eventually withdrew were all from the placebo group. Therefore, the Chiljehyangbuhwan preparation showed sufficient clinical safety.

### 10. Abstractor's comments

In this study, the final analysis included only a small number of patients as many patients dropped out during the trial. Moreover, analysis of efficacy and safety was limited by the small number of patients, drug taking, and short observation period. As the symptoms of dysmenorrhea persist over multiple menstrual cycles, extension of treatment and the observation period as well as methods to minimize the drop-out rate should be considered. Moreover, objective rather than subjective methods for evaluating dysmenorrhea should be used and are needed.

### 11. Abstractor and date

Cho JH, 16 July 2010.

## 14. Genitourinary Tract Disorders (including Climacteric Disorders)

### Reference

Cho JH. A pilot study of the difference between Gyejibongnyeong-hwan and Gyejibongnyeong-hwan combined acupuncture therapy on the primary dysmenorrhea. *Daehan-Hanbang-Bulngwa-Hakhoeji (Journal of Oriental Obstetrics and Gynecology)* 2007; 20(1): 161–68 (in Korean with English abstract).

### 1. Objectives

To compare Gyejibongnyeong-hwan with Gyejibongnyeong-hwan plus acupuncture therapy for primary dysmenorrhea.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (details not mentioned), Republic of Korea.

### 4. Participants

Female patients with menstrual pain, regular menstrual periods every 28–30 days, and no functional disease (n=30).

### 5. Intervention

Arm 1: Gyejibongnyeong-hwan + acupuncture at the Qihai (CV6, 氣海), Guanyuan (CV4, 關元), Zhongji (CV3, 中極) and right and left Zigong (CV19, 紫宮), Sanyinjiao (SP6, 三陰交), and Xuanzhong (GB39, 懸鐘) acupuncture points, twice a week for 8 weeks, total of 16 treatments (n=15).

Arm 2: Gyejibongnyeong-hwan only (n=15).

Among 30 subjects, 20 dropped out during the study.

### 6. Main Outcome Measures

Menstrual pain severity measured on a 10-point visual analogue scale (VAS) before, during, and after the treatment.

### 7. Main Results

Treatment relieved menstrual pain in both arms. The decrease in VAS score was greater in Arm 2.

### 8. Conclusions

Gyejibongnyeong-hwan provides marked menstrual pain relief and treatment in Arm 2 is more efficacious than treatment in Arm 1.

### 9. Safety assessment in the article

There was no pre- to post-treatment change in aspartate aminotransferase (AST), alanine aminotransferase (ALT), and blood urea nitrogen (BUN) levels.

### 10. Abstractor's comments

Unexpectedly, treatment with Gyejibongnyeong-hwan only was more effective than treatment with Gyejibongnyeong-hwan plus acupuncture. But 20 patients withdrew and only 10 patients finished the trial, so it is hard to draw a firm conclusion. An additional clinical trial with a large number of patients is needed.

### 11. Abstractor and date

Cho JH, 16 July 2010.

## 14. Genitourinary Tract Disorders (including Climacteric Disorders)

### Reference

Kim KH, Kang KW, Kim DI, et al. Effects of acupuncture on hot flashes in perimenopausal and postmenopausal women—a multicenter randomized clinical trial. *The Journal of the North American Menopause Society* 2010; 11(2): 269–80.

### 1. Objectives

To evaluate the effect of acupuncture on hot flashes and climacteric symptoms.

### 2. Design

Randomized controlled trial (RCT) (multicenter).

### 3. Setting

Four Oriental hospitals (Dongkuk, Semyung, Dongeui, and Kyunghee University), Republic of Korea.

### 4. Participants

Women (age, 45–60) with daily perimenopausal and hot flash scores totalling >10 (n=175). The daily frequency of hot flashes, which ranged from 0 to 4, was used the indicator of severity (0, none; 1, mild; 2, moderate; 3, severe; 4, very severe).

### 5. Intervention

Arm 1: Acupuncture applied to the Zusanli (ST36, 足三里), Sanyinjiao (SP,6 三陰交), Hegu (LI4, 合谷), Neiguan (PC6, 內關), Shenmen (HT7, 神門), and Shaofu (HT8, 少府) acupuncture points 3 times per week for 4 consecutive weeks (n=116).

Arm 2: No treatment (n=59).

Of 175 subjects, 19 (8 in Arm 1, 11 in Arm 2) dropped out of the study.

### 6. Main Outcome Measures

Hot flash scores during 24 hours, score on Menopause Rating Scale (MR-S).

### 7. Main Results

Treatment for 4 weeks significantly decreased the frequency of hot flashes in Arm 1 compared to Arm 2. The mean change in the average 24-hour hot flash score was –16.57 in the treatment group (n=116) and –6.93 in the control group (n=59), a difference of 9.64 ( $P<0.0001$ ).

The total Menopause Rating Scale score showed significant improvement in the acupuncture group compared with the control group ( $P<0.001$ ).

### 8. Conclusions

Acupuncture treatment for 4 weeks can decrease the frequency of hot flashes.

### 9. Safety assessment in the article

Mild and transient adverse events (unrelated to treatment) were observed in 13 patients in Arm 1.

### 10. Abstractor's comments

This study evaluated the effect of acupuncture treatment on hot flashes (an important climacteric symptom). The study shows that acupuncture treatment is effective. Additional studies comparing the effectiveness of acupuncture with that of hormone replacement therapy for hot flashes are needed.

### 11. Abstractor and date

Cho JH, 16 July 2010.

## 14. Genitourinary Tract Disorders (including Climacteric Disorders)

### Reference

Park JE, Lee MS, Jung SY, et al. Moxibustion for treating menopausal hot flashes: A randomized clinical trial. *Menopause* 2009; 16(4): 660–65.

### 1. Objectives

To evaluate the effect of moxibustion on hot flashes of menopausal women.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One research institute (details not mentioned), Republic of Korea.

### 4. Participants

Perimenopausal and postmenopausal women (age, 45–60 years) who experienced severe hot flashes at least 5 times a day (n=51).

### 5. Intervention

Arm 1: Moxibustion applied to the Zhongwan (CV12, 中脘), Guanyuan (CV 4, 關元), and right and left Zusanli (ST36, 足三里) and Sanyinjiao (SP6, 三陰交) acupuncture points, 14 treatments given over a 4-week period (n=21).

Arm 2: Moxibustion applied to the Mingmen (GV4, 命門), Guanyuan (CV4, 關元), Qihai (CV6, 氣海), and right and left Shenshu (BL23, 腎俞) acupuncture points, 14 treatments given over a 4-week period (n=20).

Arm 3: No treatment (n=10).

### 6. Main Outcome Measures

The frequency and strength of hot flashes, and scores on the Menopausal-Specific Quality of Life Scale (MENQOL) and Menopause Rating Scale (MRS).

### 7. Main Results

Treatment for 4 weeks significantly reduced the frequency and strength of hot flashes in Arm 1 compared to Arm 2 and Arm 3. Moreover, treatment resulted in a significant difference in MENQOL and MRS scores between Arm 2 and the other arms of the trial.

### 8. Conclusions

Moxibustion can reduce the frequency and strength of hot flashes in menopausal women.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study provided an alternative method of moxibustion treatment. A similar study of the effect of this method on various diseases is needed.

### 11. Abstractor and date

Cho JH, 16 July 2010.

## 14. Genitourinary Tract Disorders (including Climacteric Disorders)

### Reference

Kim HS, Yoon YJ, Lee JM, et al. A clinical study on the effect of red ginseng for postmenopausal hot flushes. *Daehan-Hanbang-Bulngwa-Hakhoeji (Journal of Oriental Obstetrics and Gynecology)* 2009; 22(2): 132–39 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of red ginseng for hot flushes in postmenopausal women.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Women with no menstrual period with the last 6 months, complaints of hot flushes (grade >7) for a minimum one day within a 2-week period, follicle stimulating hormone (FSH) level <40 IU/L, and estradiol level >35 pg/mL. Patients who had a hormone replacement therapy within last 6 months or climacteric therapy (Vit. E or clonidine) were excluded (n=46).

### 5. Intervention

Arm 1: Red ginseng powder 100%, 0.3 g/capsule, t.i.d. for 8 weeks.

Arm 2: Placebo (corn starch, very small amount of red ginseng powder, natural pigment, caramel pigment), 0.3 g/capsule, t.i.d. for 8 weeks.

Finally 14 subjects in Arm 1 and 12 subjects in Arm 2 completed the study.

### 6. Main Outcome Measures

Daily frequency of hot flushes, face temperature measurement using Digital Infrared Thermal Imaging (DITI).

### 7. Main Results

Treatment for 8 weeks significantly reduced the daily frequency of hot flushes ( $P<0.01$ ) but had no effect on face temperature in both arms.

### 8. Conclusions

Red ginseng (known as a heat-inducing drug) has no effect on the frequency of hot flushes.

### 9. Safety assessment in the article

AST/ALT was increased from 25/23 to 43/42 in one patient in Arm 1.

### 10. Abstractor's comments

Too many patients dropped out during the trial, so the reliability of the study is low. An additional clinical study with large number of patients is needed.

### 11. Abstractor and date

Cho JH, 16 July 2010.

## 14. Genitourinary Tract Disorders (including Climacteric Disorders)

### Reference

Kim SM, Shin SM, Kim EI, et al. A clinical study on the effect of Daejo-hwan (DJH) on climacteric syndrome. *Daehan-Hanbang-BuIngwa-Hakhoeji (Journal of Oriental Obstetrics and Gynecology)* 2006; 19(4): 225–44 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of Daejo-hwan (大造丸, DJH) on climacteric syndrome, not only on common symptoms such as hot flashes, anxiety, and palpitation, but also on urogenital tract disturbances like vaginal dryness, which leads to sexual problems.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Cheongju Oriental Hospital of Daejeon University), Republic of Korea.

### 4. Participants

Patients who visited the climacteric syndrome clinic in the hospital and were diagnosed as having climacteric syndrome (severity of symptoms measured by Kupperman scoring). Those receiving alternative therapies within 3 months of their last treatment during the trial, and Eastern medications during the 8-week trial period, were excluded.

### 5. Intervention

Arm 1: DJH (大造丸; 2 g/pill) two pills 3 times per day, 30 minutes postprandially for 8 weeks (n=57).  
Arm 2: No treatment (n=35).

### 6. Main Outcome Measures

Follicle-stimulating hormone (FSH), luteinizing hormone (LH), total estrogen, and estradiol (E2) levels, and scores on the Kupperman's index, Menopausal Rating Scale (MRS), and Greene Climacteric Scale (GCS).

### 7. Main Results

Treatment significantly decreased scores on the GCS ( $17.9 \pm 8.2$  [before] vs.  $12.8 \pm 8.2$  [after treatment]), MRS ( $13.2 \pm 8.2$  vs.  $8.3 \pm 6.3$ ;  $P < 0.001$ ), and Kupperman's index ( $48.2 \pm 26.7$  vs.  $29.8 \pm 21.2$ ;  $P < 0.000$ ) in Arm 1 and GCS ( $16.5 \pm 7.2$  vs.  $15.1 \pm 6.8$ ;  $P = 0.123$ ), MRS ( $10.7 \pm 6.6$  vs.  $10.6 \pm 7.2$ ;  $P = 0.873$ ) and Kupperman's index ( $36.2 \pm 19.8$  vs.  $39.3 \pm 22.8$ ;  $P = 0.303$ ) in Arm 2, but the between-group difference in these measures was not significant.

### 8. Conclusions

Daejo-hwan (DJH) can be useful in treating climacteric syndrome symptoms.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the efficacy of Daejo-hwan (DJH) for climacteric syndrome. However, the randomization method is not described, and a more systematic study with randomization is needed.

### 11. Abstractor and date

Cho JH, 16 July 2010.

## 15. Ante/Post-partum Diseases

### Reference

Hwang DS, Park MW, Chun HN, et al. Effects of Mokhyangsaenghwa-tang beverage on postpartum recovery and lactation. *Daehan-Hanbang-BuIngwa-Hakhoeji (Journal of Oriental Obstetrics and Gynecology)* 2006; 19(4): 216–24 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of Mokhyangsaenghwa-tang (木香生化湯) on postpartum recovery and lactation.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (details not mentioned), Republic of Korea.

### 4. Participants

Healthy women who gave birth to full-term healthy infants (38–42 weeks) (n=65).

### 5. Intervention

Arm 1: Mokhyangsaenghwa-tang (木香生化湯), 3 potions per day for 40 days.

Arm 2: Placebo drug (containing citron juice), 2 potions per day for 40 days.

Totally, 35 patients dropped out, and 30 patients were completed the study (18 in Arm 1, 12 in Arm 2).

### 6. Main Outcome Measures

Laboratory blood analysis, body composition analysis.

### 7. Main Results

Fever, sweating, body weight, Body Mass Index (BMI), total body water contents, edema index, and prolactin concentration decreased significantly in both groups ( $P<0.05$ ) but without between group differences in these measures after 20 days as well as 40 days of treatment. Pain in the lower abdomen decreased significantly after 40 days but not after 20 days in both groups ( $P<0.05$ ). However, there was no significant between-group difference in pain reduction. There was a statistically significant between-group difference in general condition after 20 days of treatment ( $P<0.05$ ), but not after 40 days of treatment.

### 8. Conclusions

Body weight, BMI, total body water contents, edema index, and prolactin concentration all decrease significantly after intake of Mokhyangsaenghwa-tang. Moreover, sweating, fever, pain in the lower abdomen, and general condition all improve significantly with time.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the efficacy of Mokhyangsaenghwa-tang for postpartum recovery and lactation. However, administration of a beverage makes it hard to reach an effective concentration, and distinct efficacy was not shown. Therefore, additional clinical trials to establish efficacy and effective concentration are needed.

### 11. Abstractor and date

Cho JH, 16 July 2010.

## 18. Symptoms and Signs

### Reference

Jang IS, Ko CN, Lee I, et al. Effect of Cardiogenic Pills<sup>®</sup> (心適丸) on chest pain and discomfort: A multi-center double-blind randomized controlled trial. *Daehan-Hanui-Hakhoeji (Journal of Korean Oriental Medicine)* 2005; 26(2): 95–104 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of Cardiogenic Pills<sup>®</sup> (心適丸) on chest pain and discomfort.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

Four Oriental hospitals (Kangnam Kyunghee, Usuk Jeonju, Wonkwang Iksan, and Bundangcha Oriental Hospital), Republic of Korea.

### 4. Participants

Males and females (age, 20–70 years) presenting as outpatients between August 2003 and July 2004 with chest pain and discomfort more than once during a 2-week observation period (n=67).

### 5. Intervention

Arm 1: Cardiogenic Pills<sup>®</sup> (心適丸) (Sam Chun Dang Pharm. Co., Ltd, Contents: *Salviae Miltiorrhizae Radix, Notoginseng Radix, Borneolum Syntheticum*) (n=33).

Arm 2: Placebo control (Caramel, Polyethylene Glycol 6000, Polyethylene Glycol 400, Borrel) (n=34).

Of 67 subjects, 17 subjects dropped out during the study (8 in Arm 1, 9 in Arm 2).

Course of treatment: 3 times per day, 10 pills per treatment for 8 weeks (56 days).

### 6. Main Outcome Measures

Score on global assessment scale (severity of illness, global improvement).

### 7. Main Results

During the observation period, 14 out of 81 participants were excluded. During the clinical trial, 8 patients in Arm 1 and 9 patients in Arm 2 withdrew. There was no between-group difference in age ( $43.3 \pm 7.5$  in Arm 1 and  $46.0 \pm 9.6$  in Arm 2). Totally, 50 patients (25 in each arm) were included for analysis. The 8-week treatment significantly reduced the severity of illness in Arm 1 ( $14/25=0.56$ ) compared to Arm 2 ( $7/25=0.28$ ). Overall improvement, and improvements in total symptom score and frequency of symptoms were greater in Arm 1 than Arm 2, but the between-group differences were without significance.

### 8. Conclusions

Cardiogenic Pills provide significant relief of chest pain and discomfort. Therefore, this drug can be used to treat chest pain and discomfort related to cardiac diseases, or of unknown cause.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the effect of Cardiogenic Pills on chest pain and discomfort. The global assessment score showed significant improvement in those treated with Cardiogenic Pills compared with those treated with placebo. As there are few randomized, controlled trials, this study is of great importance. However, the small number of subjects and insufficiently described mechanism of action are deficiencies of this study.

### 11. Abstractor and date

Jang GT, 31 August 2010.



## 18. Symptoms and Signs

### Reference

Lee SK, Lee SW, Choi DH. Effect of acupuncture on P6 for preventing opioid-induced nausea and vomiting. *Dongui-Saengli-Byeongli-Hakhoeji (Korean Journal of Oriental Physiology & Pathology)* 2007; 21(6): 1637–40 (in Korean with English abstract).

### 1. Objectives

To evaluate acupuncture at the Neiguan (PC6, 内關) acupoint for preventing opioid-induced nausea and vomiting.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (details not mentioned), Republic of Korea.

### 4. Participants

Patients receiving the opioid drug fentanyl and the nonsteroidal anti-inflammatory drug Ketorolac during laparoscopic surgery *via* an intravenous, patient controlled analgesia (PCA) pump (n=83).

### 5. Intervention

Arm1: Acupuncture at the Neiguan (PC6, 内關) acupoint and followed by low frequency electrostimulation (5 Hz) for 20 minutes (n=40).

Arm 2: No treatment (n=43).

### 6. Main Outcome Measures

Questionnaire (development, strength, and frequency of nausea).

### 7. Main Results

Treatment decreased the frequency of nausea (10.0% in Arm1 vs 23.3% in Arm 2) and vomiting (0% in Arm1 and 11.6% in Arm 2) within 48 hours. The strength of nausea was none (n=36), weak (n=3), moderate (n=1), severe (n=0) in Arm1 and none (n=33), weak (n=5), moderate (n=2), and severe (n=3) in Arm 2.

### 8. Conclusions

Acupuncture at the Neiguan (PC6) acupoint and followed by electrostimulation can prevent opioid-induced nausea and vomiting. But the differences between groups lack statistical significance.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated acupuncture at the Neiguan (PC6) acupoint for preventing opioid-induced nausea and vomiting. Patients (n=83) receiving fentanyl and Ketorolac during laparoscopic surgery via a PCA device were enrolled. In the the treatment group, patients received acupuncture at the Neiguan (PC6) acupoint followed by low frequency electrostimulation (5 Hz) for 20 minutes, and in the control group, patients received no treatment. However, there was no significant between-group difference in the postoperative development, strength, and frequency of nausea. In a previous report showing that Neiguan (PC6) acupoint stimulation prevents nausea, it was suggested that a well-designed study was needed to evaluate the efficacy of this treatment.

### 11. Abstractor and date

Kim JS, 9 June 2010.

## 18. Symptoms and Signs

### Reference

Kim Y, Kim CW, Kim KS. Clinical observations on postoperative vomiting treated by auricular acupuncture *American Journal of Chinese Medicine* 2003; 31(3): 475–80.

### 1. Objectives

To evaluate the effect of auricular acupuncture on postoperative vomiting.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (details not mentioned), Republic of Korea.

### 4. Participants

Women who received hysterectomy (n=100) (average age: Arm 1=43.5, Arm 2=41.5 years,).

### 5. Intervention

Arm1: Preanesthetic auricular acupuncture (acupoints: sympathetic, stomach, shinmoon, and occiput).

Arm2: No treatment (control).

### 6. Main Outcome Measures

Assessment of nausea and vomiting 12 hours postoperatively.

### 7. Main Results

Treatment significantly decreased the frequency of nausea and vomiting 12 hours postoperatively in Arm 1 compared to Arm 2 (30% in Arm 1 vs. 68% in Arm2,  $P<0.01$ ).

### 8. Conclusions

Auricular acupuncture at sympathetic, stomach, shinmoon, and occiput acupoints significantly reduces postoperative vomiting.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This randomized, controlled trial compared the effect of auricular acupuncture with that of no treatment on postoperative vomiting within 12 hours after hysterectomy. The auricular acupuncture at sympathetic, stomach, shinmoon, and occiput acupoints significantly reduced the incidence of postoperative vomiting. Although the number of patients in the control group was too small and assessment of nausea and vomiting was subjective, it is thought that this study shows that auricular acupuncture has an effect on postoperative vomiting.

### 11. Abstractor and date

Kim JS, 10 June 2010.

## 18. Symptoms and Signs

### Reference

Kim SU, Lee JS, Kim SS, et al. The effect of microcurrent electrical neuromuscular stimulation on stress-related hormones. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2003; 13(4): 1–18 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of microcurrent electrical neuromuscular stimulation (MENS) on emotional shock and stress condition.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (details not mentioned), Republic of Korea.

### 4. Participants

Healthy volunteer male students (n=36).

### 5. Intervention

Arm 1: Treatment group 1. (M+S)-Stimulation of the right and left Jianjing (GB 21, 肩井) acupoints 1 cm deep and applied in 3 stages of MENS using a Microtim 400-III after a stress task. (One day before the experiment, subjects were ordered to do computer work and forbidden to sleep from 10 PM to 7 AM. On the day of the experiment, subjects were ordered to do barbell shrugs for trapezius exercise for 1 hour beginning at 3 PM.) (N=9).

Arm 2: Treatment group 2. (NM+S)-Stimulation of a non-acupoint (using the same procedure) after the same stress task. The non-acupoint was located on the virtual line connecting the inferior angle of the scapula with the spinous processes of the sacral vertebrae, away from the Urinary Bladder Meridian (足太陽膀胱經), and 4 chon (寸, about 12 cm) from of the right and left acupoints.

Arm 3: Treatment group 3. (M+NS)-Stimulation of the right and left Jianjing (GB 21, 肩井) acupoints but no stress task (N=9).

Arm 4: Treatment group 4. (NM+NS)-Stimulation of non-acupoints but no stress task (N=9).

### 6. Main Outcome Measures

Levels of hormones (ACTH,  $\beta$ -endorphin, cortisol, catecholamine, norepinephrine, epinephrine) in blood and urine.

### 7. Main Results

In Arm 1 and Arm 2, ACTH level was significantly increased after stress ( $P<0.01$ ), but significantly decreased immediately and 30 minutes after MENS ( $P<0.05$ ), and  $\beta$ -endorphin level was slightly increased after stress, and decreased right after and 30 minutes after MENS, but the decrease was without significance. Cortisol significantly increased after stress ( $P<0.01$  in Arm 1 and  $P<0.05$  in Arm 2) but significantly decreased right after ( $P<0.05$ ) and 30 minutes after MENS ( $P<0.001$ ) in Arm 1, and right after MENS in Arm 2 ( $P<0.05$ ). Norepinephrine level in all groups was significantly decreased right after MENS treatment ( $P<0.01$  in Arm 1, Arm 3, and Arm 4;  $P<0.05$  in Arm 2). Epinephrine level in Arm 2 was significantly increased after stress ( $P<0.05$ ) but decreased right after MENS ( $P<0.05$ ).

### 8. Conclusions

The hormonal change after MENS indicates that there is a hormonal mechanism distinct from the MENS mechanism that unites mind and body, so MENS can be used to treat pain and mental and physical disorders.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluates the effect of MENS on emotional shock under stress conditions. Hormonal changes were evaluated in 4 groups divided on the basis of stress, acupuncture, and MENS application. The study is very meaningful insofar as this is a randomized, controlled trial of MENS under stress conditions. However, the effect is difficult to assess as the change in stress level in individual subjects has not been mentioned.

### 11. Abstractor and date

Jang GT, 31 August 2010.

## 18. Symptoms and Signs

### Reference

Kim JJ, Kim EJ, Lee SH, et al. Antipyretic effect of blood-letting at the Sybsun-points on fever comparing with aspirin injection. *Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)* 2003; 24(3): 675–80 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of venesection at the Sybsun-point (十宣穴) on fever.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Twenty-four patients hospitalized in an Oriental hospital between 1 March 2002 to 31 December 2002, with armpit body temperature over 38°C sequentially measured by mercury thermometer.

### 5. Intervention

Arm 1: venesection (1–2 cc) using a three-edged needle (三稜鍼) at the Sybsun-point. Allowed tepid water massage (n=13).

Arm 2: intravenous injection of aspirin lysine 250 mg. Allowed tepid water massage (n=11).

Three subjects (Arm 1) dropped out of the study.

### 6. Main outcome measures

Mean armpit body temperature measured twice just before treatment, and 2 and 8 hours after treatment.

### 7. Main results

1) All the patients showed a drop in body temperature with the passage of time, and there was no statistically significant between-group difference in temperature drop at 2 and 8 hours after treatment.

2) In Arm 2, the body temperature dropped about 1°C 2 hours after treatment and stayed the same or rose slightly 8 hours after treatment; in Arm 1, it dropped about 0.7°C 2 hours after treatment and a further 0.6°C thereafter.

### 8. Conclusions

Both venesection at the Sybsun-point and aspirin injection therapy lower, to a similar extent, body temperature in patients with fever.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

Although the patients were randomized to each group, the spectrum of diseases causing fever differed between the groups. Since this difference could influence the study result, the analysis should have been carried out after stratification by disease, or the effect of venesection on fever should have been evaluated for each disease. Venesection was shown to significantly reduce fever, but in-depth study is needed to determine its mechanism of action.

### 11. Abstractor and date

Cho JH, 16 July 2010.

## 18. Symptoms and Signs

### Reference

Choi DY, Lim SB, Cha NH, et al. Effects on pain behavior in non-medicinal treatment applied to chronic headache patients. *Gyeonglak-Gyeonghyeol-Hakhoeji (The Korean Journal of Meridian & Acupoint)* 2005; 22(1): 55–66 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of non-medicinal treatment on pain behavior in chronic headache patients.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital, one Western hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Patients with chronic headache at least 4 hours a day for more than 15 days (n=86, age=20–65 years).

### 5. Intervention

Arm 1: Acupuncture applied to the Baihui (GV20, 百會), Sishencong (EX-HN23, 四神聰), Touwei (ST8, 頭維), Taiyang (EX-HN46, 太陽), Yingxiang (LI20, 迎香), Yifeng (TE17, 翳風), Fengchi (GB20, 風池), Quchi (LI11, 曲池), Zusanli (ST36, 足三里), Hegu (LI4, 合谷), and Taichong (LR3, 太衝) acupoints for 20 minutes using disposable needles, twice a week for 4 weeks (n=43).

Arm 2: Nerve block therapy (stellate ganglion block at the transverse process of the 6<sup>th</sup> cervical vertebra using 7–8 ml of 1% mepivacaine) (n=43)

Of 86 subjects, 35 subjects (15 in Arm 1; 20 in Arm2) dropped out.

### 6. Main Outcome Measures

Headache severity evaluated on a visual analogue scale (VAS), Brief Pain Inventory (BPI).

### 7. Main Results

Headache score was significantly decreased in both Arm 1 ( $Z=-4.386$ ,  $P=0.000$ ) and Arm 2 ( $Z=-4.036$ ,  $P=0.000$ ), suggesting that the non-medicinal treatment also relieves headaches. Treatment also significantly increased quality of life (QOL) measures including general activity, mood, enjoyment of life, personal relationships, and sleeping, suggesting that the non-medicinal treatment is effective. The degree of satisfaction also decreased in both groups, but not significantly.

### 8. Conclusions

Both 4-week treatments reduce headache and improve QOL. However, the superiority of one treatment over the other cannot be concluded. Acupuncture could be the effective treatment for chronic headache. Evaluation of cotreatments in further studies is suggested.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study compares the effectiveness of acupuncture and with that of stellate ganglion block treatment for chronic headache. Both treatments relieved chronic headache to a similar degree. A limitation of the study is that no randomization method was mentioned specifically. Nevertheless, this is a randomized, controlled trial on relief of headache pain. In the future, it is suggested that studies approach the problem from various points of view.

### 11. Abstractor and date

Jang KT, 31 August, 2010.

## 18. Symptoms and Signs

### Reference

Kim HK, Youn HM, Ahn CB. Clinical studies on Hwangryunhaedoktang herbal-acupuncture therapy on functional headache. *Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)* 2006; 9(3): 131–38 (in Korean with English abstract).

### 1. Objectives

To evaluate the efficacy of Hwangryunhaedoktang (黃連解毒湯) herbal-acupuncture therapy for functional headache.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Oriental Medicine Hospital of Dongeui Universtiy), Republic of Korea.

### 4. Participants

Patients with functional headache (not organic headache) who visited the hospital between September 2006 and the end of October 2006 (n=26).

### 5. Intervention

Arm1: Hwangryunhaedoktang (0.6 cc) injected using a 1-cc insulin syringe with a 30 gauge 5/16" needle at both the right and left Fengchi (GB20, 風池), Jianjing (GB21, 肩井), and Hegu (LI4, 合谷) acupoints for 2 days, total 4 treatments (n=13).

Arm 2: Saline (0.6 cc) injected using a 1-cc insulin syringe with a 30 gauge 5/16" needle at both the right and left Fengchi (GB20, 風池), Jianjing (GB21, 肩井), and Hegu (LI4, 合谷) acupoints for 2 days, total 4 treatments (n=13).

### 6. Main Outcome Measures

Pain evaluated on a visual analogue scale (VAS), Brief Pain Inventory (BPI) score.

### 7. Main Results

The control treatment over time significantly reduced VAS score ( $P<0.05$ ) and improved the Mood subscore of the BPI but not subscores for General activity, Enjoyment of life, Relations with other people, and sleep. Hwangryunhaedoktang herbal-acupuncture significantly reduced VAS score ( $P<0.05$ ) and improved BPI subscores for General activity, Mood, Enjoyment of life, Relations with other people, and sleep. There were significant between-group differences in VAS and BPI scores after the fourth but not after the first, second, and third rounds of treatment.

### 8. Conclusions

Hwangryunhaedoktang herbal-acupuncture is more effective than control treatment for functional headache.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the effectiveness of Hwangryunhaedoktang herbal-acupuncture for functional headache. The subjects were divided into control and treatment groups, and after fourth round of treatment, VAS and BPI scores were significantly improved. However, insofar as the control group also showed improvement, it is thought that additional evaluation of the effectiveness is needed. This study has a meaning since there are not so many randomized, controlled trial of the herbal-acupuncture treatment for headache. Additional study with other evaluation standards to verify the specific effect of the Hwangryunhaedoktang herbal-acupuncture treatment for functional headache is needed.

### 11. Abstractor and date

Jang KT, 31 August 2010.

## 18. Symptoms and Signs

### Reference

Jung IT, Kim SY, Kim KS, et al. A clinical study of aroma acupuncture on chronic headache patients. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2004; 21(5): 123–36 (in Korean with English abstract).

### 1. Objectives

To compare the effectiveness of general and aroma acupuncture as treatment for chronic headache.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Kyunghee University Medical Center), Republic of Korea.

### 4. Participants

Patients with chronic headache who visited the hospital between February and July 2004.

The headache lasted more than 4 hours a day, and occurred on more than 15 days a month (n=38).

### 5. Intervention

Arm 1: Aroma acupuncture (twice a week for 8 weeks) (n=15).

Arm 2: General acupuncture (twice a week for 8 weeks)(n= 23).

In both groups, acupuncture was applied to the Baihui (GV20, 百會), Sishencong (EX-HN23, 四神聰), Touwei (ST8, 頭維), Taiyang (EX-HN46, 太陽), Yingxiang (LI20, 迎香), Yifeng (TE17, 翳風), Fengchi (GB20, 風池), Quchi (LI11, 曲池), Zusanli (ST36, 足三里), Hegu (LI4, 合谷), and Taichong (LR3, 太衝) acupoints for 20 minutes.

### 6. Main Outcome Measures

Pain evaluated on a visual analogue scale (VAS), Brief Pain Inventory (BPI).

### 7. Main Results

In Arm 2, there was significant improvement in VAS score after 4 and 8 weeks of treatment and in BPI subscores for mood and relations with other people ( $P<0.05$ ) but not for general activity, enjoyment of life, and sleep. In Arm 1, there was significant improvement in VAS score after 4 and 8 weeks of treatment and in BPI subscores for general activity, mood, enjoyment of life, relations with other people, and sleep ( $P<0.05$ ). The decrease in VAS score was significantly greater in Arm 1 than Arm 2 ( $P<0.05$ ). There were no between-group differences in subscores for general activity, mood, and relations with other people, but the improvement in subscores for enjoyment of life and sleep were significantly greater in Arm 1 than Arm 2.

### 8. Conclusions

Aroma acupuncture was more effective than general acupuncture for relieving chronic headache pain and improving quality of life.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study compares the efficacy of general acupuncture with that of aroma acupuncture for chronic headache. Through VAS and BPI score analysis, both treatments were shown to be effective, and the greater efficacy of aroma acupuncture was confirmed objectively. However, the lack of a description of the randomization method and aroma method used in this study are limitations.

### 11. Abstractor and date

Jang KT, 31 August 2010.

## 18. Symptoms and Signs

### Reference

Kim SH, Park HJ, Park HA, et al. The clinical study on the effect of SAAM acupuncture treatment for patients with fatigue. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2007; 23(6): 149–57 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of SAAM acupuncture treatment for patients with fatigue.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Dongseo Oriental Hospital), Republic of Korea.

### 4. Participants

Patients without present organic and mental disorders or a history of them who visited the hospital's fatigue clinic between 1<sup>st</sup> April 2007 and 30<sup>th</sup> September (n=56).

### 5. Intervention

Arm 1: Treatment group. Acupuncture at the Jingqu (LU8, 經渠), Taibai (SP3, 太白), Shaofu (HT8, 少府), Qihai (CV6, 氣海), and Xinshu (BL15, 心俞) acupoints (n=28).

Arm 2: Control group. Acupuncture at non-acupoints located on same contour line with the above-mentioned real acupoints and on a virtual line between the real acupoints and adjacent acupoints.

Acupuncture was carried out twice a week for 4 weeks, 8 treatments in total using disposable acupuncture needles. Needle insertion was for 15 minutes. During the acupuncture, directional supplementation and draining (迎隨補瀉) and twirling supplementation and draining (捻轉補瀉) were basically in operation.

### 6. Main Outcome Measures

Reconstructed Jang See Jin's 19-item questionnaire of Multidimensional Fatigue Scale (MFS) based on the Fatigue Assessment Inventory.

### 7. Main Results

The reduction in MFS was significantly different between Arm 1 and Arm 2 after 2 weeks of treatment ( $P<0.05$ ). The decrease in MFS score was significant in Arm 1 after 1 week of treatment, and in Arm 2 after 2 weeks of treatment.

### 8. Conclusions

SAAM acupuncture is more effective for the treatment of fatigue than is acupuncture at non-acupoints.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated SAAM acupuncture for with the treatment of fatigue. This study is meaningful insofar as it is one of only a few randomized, controlled trials of acupuncture for fatigue amelioration. Although the between-group difference was significant, significant improvement was also noted after 2 weeks of control treatment. Additional efficacy evaluation comparing placebo control, general acupuncture, and SAAM acupuncture is suggested.

### 11. Abstractor and date

Jang KT, 31 August 2010.



## 18. Symptoms and Signs

### Reference

Cho JH, Cho CK, Shin JW, Son JY, Kang W, Son CG. Myelophil, an extract mix of astragali radix and salviae radix, ameliorates chronic fatigue: A randomized, double-blind, controlled pilot study. *Complementary Therapies in Medicine* 2009; 17(3): 141–46.

### 1. Objectives

To evaluate the effect of Myelophil on patients with chronic fatigue.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (Dunsan Oriental Hospital of Daejeon), Republic of Korea.

### 4. Participants

Patients with fatigue more than 6 months (n=36, male/female=13/23, average age=44 years).

### 5. Intervention

Arm 1: Treatment group 1. (Low dosage)-Myelophil 1.5 g per treatment, b.i.d. for 4 weeks (n=13).

Arm 2: Treatment group 2. (High dosage)-Myelophil 3 g per treatment, b.i.d. for 4 weeks (n=11).

Arm 3: Control group. Hyangsapyungwisan (香砂平胃散), 1.5 g per treatment, b.i.d. for 4 weeks (n=12).

Lyophilised Myelophil was an aqueous extract of equal quantities of Astragali Radix and Salviae Radix, according to the over-the-counter Korean monograph. The extract yield was 20.5% (w/w).

### 6. Main Outcome Measures

Severity of fatigue before and after the administration of Myelophil was self-rated on a numeric rating scale (NRS) and the Chalder fatigue severity questionnaire, translated into Korean.

### 7. Main Results

The severity of fatigue (NRS mean±standard deviation) was initially 52.5±17.2, 41.9±15.8, and 46.3±17.8 in the low-dose, high-dose, and control groups, respectively and improved over time, in all three groups. The linear mixed models showed statistically significant differences with respect to both time and group ( $P<0.05$ ). The severity of fatigue (VAS mean±standard deviation) was initially 6.5±1.5, 5.9±1.0, and 5.9±1.6 in the low-dose, high-dose, and control groups, respectively, and decreased over time in all three groups, indicating a decrease in the severity of fatigue. However, only the low-dose group showed significant improvement in feelings of fatigue, compared with the control ( $P<0.05$ ). To examine the effect of Myelophil on immunological status, the expression of 42 serum cytokines was analyzed using an antibody array. There was no significant difference in the expression of any cytokine after 4 weeks of Myelophil treatment, at either dose.

### 8. Conclusions

The NRS and VAS results are consistent and support the conclusion that Myelophil reduces chronic fatigue. The low dose of Myelophil seemed to be more effective than the high dose, as only the low-dose resulted in statistically significant differences in both the NRS and VAS scores. Serum levels of 42 cytokines before and after Myelophil treatment remained unchanged at either Myelophil dose. Myelophil acts against chronic fatigue, especially against physical manifestations of fatigue.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluates the ameliorative effect of Myelophil on chronic fatigue. This study is meaningful in that it is a randomized, controlled trial and published in a Science Citation Index Expanded international journal. Although the effectiveness of Myelophil was demonstrated, the anti-fatigue mechanism of Myelophil was not.

### 11. Abstractor and date

Jang KT, 31 August 2010.

## 18. Symptoms and Signs

### Reference

Chun SY, Lee ES. The effects of the magnetic therapy treated on acupuncture point for recovery from fatigue with before and after exercise. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 1998; 8(1): 158–70 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of treatment with magnetic field on fatigue-related physiological changes.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (details not mentioned), Republic of Korea.

### 4. Participants

Gymnastics students of K University (n=14).

### 5. Intervention

Arm 1: Magnetic treatment group (n=5). Magnetic treatment at the bilateral Zusanli (ST36, 足三里), Chengjin (UB56, 承筋), and Chengshan (UB57, 承山) acupuncture points.

Arm 2: Intradermal acupuncture treatment group (n=4). Intradermal acupuncture treatment at the bilateral Zusanli (ST36, 足三里), Chengjin (UB56, 承筋), and Chengshan (UB57, 承山) acupuncture points.

Arm 3: Non-magnetic treatment group (n=5). Moxa-pellet treatment at the bilateral Zusanli (ST36, 足三里), Chengjin (UB56, 承筋), and Chengshan (UB57, 承山) acupuncture points. A moxa-pellet is similar in appearance to a permanent magnet but has no magnetic field or needle.

### 6. Main outcome measures

Blood lactic acid concentration, change in heart rate, change in oxygen uptake, ventilation rate per minute, lactic acid concentration, and change in heart rate recovery at 15 minutes after exercise, reaction time to light stimulation before and after of maximal exercise.

### 7. Main results

- 1) The blood lactic acid concentration at maximal exercise was decreased in magnetic treatment group and intradermal acupuncture treatment group during convalescence, and was significantly different from that in the other group.
- 2) The heart rate at maximal exercise was decreased in magnetic treatment group and intradermal acupuncture treatment group, but remained unchanged during every period of exercise in the non-magnetic treatment group. The difference in heart rate was significant among groups.
- 3) Among the groups, the intradermal acupuncture treatment group showed higher oxygen uptake.
- 4) Lactic acid concentration and heart recovery rate at the end of 15 minutes of convalescence after maximal exercise improved in the magnetic treatment group and intradermal acupuncture treatment group but not in the non-magnetic treatment group, which showed a tendency toward less improvement.

### 8. Conclusions

Magnetic treatment significantly improves recovery from fatigue-related change.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This article described how magnetic fields can be used to reduce physiological changes related to fatigue. This method could be applied in parallel with other therapies.

### 11. Abstractor

Cho SH, 13 July 2010.

## 18. Symptoms and Signs

### Reference

Kim HK, Lee ES. The effect of magnetic field stimulation of ear acupoints on physical vitality before and after exercise.\* *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 1998; 8(1): 187–202 (in Korean).

### 1. Objectives

To evaluate the effect of magnetic field therapy on recovery from muscle fatigue.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (details not mentioned), Republic of Korea.

### 4. Participants

Student gymnasts (n=14).

### 5. Intervention

Arm 1: Magnetic therapy at the ear acupoints related to the heart, liver, Shenmen (HT7, 神門), and endocrine system (n=5).

Arm 2: Intradermal Acupuncture (n=4).

Arm 3: Moxa-pellet Treatment (n=5).

### 6. Main Outcome Measures

Physiological change in blood lactate concentration, heart rate, reaction time on light stimulation, oxygen intake, minute ventilation at maximal exercise level, and rate of recovery of lactate concentration and heart rate after maximal exercise.

### 7. Main Results

Blood lactic acid concentration was slightly and nonsignificantly lower in Arm 1 than in Arm 2 and Arm 3. Heart rate was significantly lower in Arm 1 than in Arm 2 and Arm 3. Reaction time on light stimulation was significantly reduced and rate of lactate concentration and heart rate were significantly improved in Arm 1 and Arm 2 compared to Arm 3. Minute ventilation was significantly decreased in Arm 1 compared to Arm 2 and Arm 3. However, there was no significant between-group difference in oxygen intake.

### 8. Conclusions

Magnetic therapy and intradermal acupuncture are more effective than moxa-pellet treatment. Compared with magnetic therapy, intradermal acupuncture was better at reducing oxygen intake and minute ventilation and worse at reducing heart rate and other physiological measures.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This randomized, controlled, double-blinded study evaluated the effect of the magnetic therapy at ear acupoints on muscle fatigue in comparison to intradermal acupuncture and moxa-pellet treatment. Although the study design was objective, the number of subjects was limited to 14 patients. Therefore, additional study with a large number of patients is needed.

### 11. Abstractor and date

Nam HJ, 21 August 2010.

## 19. Injury, Poisoning and Certain Other Consequences of External Causes

### Reference

Lee KH, Kim JE, Youn HM, et al. Comparison of the treatment effect between Oriental medicine therapy and Oriental and Western medicine combination therapy on traffic accident patients. *Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)* 2007; 10(3): 91–9 (in Korean with English abstract).

### 1. Objectives

To compare the effect of Oriental medicine therapy with that of Oriental-Western combination therapy on recovery from injury due to traffic accidents.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Dongueui Universtiy Ulsan Oriental Medical Hospital), Republic of Korea.

### 4. Participants

Sixty-one patients hospitalized more than 2 weeks for neck pain, shoulder-back pain, and low back pain due to nonspecific cervical and lumbar injuries and intervertebral disc herniation suffered as a result of traffic accident trauma. Patients with injuries occurring more than 6 months earlier, age lower than 10 or higher than 70 years, anamnestic spine fracture, spinal tumor, psychiatric disorders, immune disorders, diabetes mellitus, heart diseases, kidney diseases, pregnancy (lactiferous phase), infectious skin diseases, drug dependency, and under treatment with adrenocortical steroids and non-steroidal anti-inflammatory drugs, were excluded.

### 5. Intervention

Arm 1: Acupuncture applied to the Fengchi (GB20, 風池), Jianjing (GB21, 肩井), Tianzhu (BL10, 天柱), Gaohuangshu (BL43, 膏肓), Tianzong (SI11, 天宗), Shenshu (BL23, 腎俞), Qihai (BL24, 氣海俞), Dachangshu (BL25, 大腸俞), Weizhong (BL40, 委中), Kunlun (BL60, 崑崙), etc. acupoints + bee venom pharmacopuncture (蜂藥鍼) + drug treatment + cupping therapy + physiotherapy (n=32).

Arm 2: Acupuncture applied to the Fengchi (GB20, 風池), Jianjing (GB21, 肩井), Tianzhu (BL10, 天柱), Gaohuangshu (BL43, 膏肓), Tianzong (SI11, 天宗), Shenshu (BL23, 腎俞), Qihai (BL24, 氣海俞), Dachangshu (BL25, 大腸俞), Weizhong (BL40, 委中), Kunlun (BL60, 崑崙), etc. acupoints + bee venom pharmacopuncture (蜂藥鍼) + drug treatment + cupping therapy + physiotherapy + Western therapies such as diclofenac beta-dimethyl aminoethanol, etc (n=29).

### 6. Main Outcome Measures

Pain evaluated on a visual analogue scale (VAS), Neck Disability Index (NDI), Oswestry Disability Index (ODI), and Roland Morris Disability Scale (RMDS).

### 7. Main Results

In Arm 1, the change in average VAS, NDI, ODI, and RMDS scores from baseline was 1.72, 1.56, 0.94, and 0.06, respectively after 1 week of treatment and 2.94, 3.44, 2.44, and 0.88 after two weeks of treatment, respectively. In Arm 2, this was 1.86, 0.83, 0.45, and 0.21 after 1 week and 2.72, 1.69, 0.59, 0 and 72 after two weeks. This change was slightly larger in Arm 1 than Arm 2, but the between-group differences at both 1 and 2 weeks were without significance.

### 8. Conclusions

Oriental medicine therapy and Oriental-Western medicine combination therapy have similar efficacies in patients suffering traffic accident injuries.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study verified the similar efficacies of Oriental medicine therapy and Oriental-Western medicine combination therapy. The diseases for which Oriental-Western medicine combination therapy is effective need to be identified.

### 11. Abstractor and date

Cho JH, 16 July 2010.

## 19. Injury, Poisoning and Certain Other Consequences of External Causes

### Reference

Kwon KR. Effects of spiral taping in motor disturbance of the neck induced by cervical sprain—randomized clinical controlled trials. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2006; 23(2): 159–64 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of spiral taping for motor disturbance of the neck induced by cervical sprain.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Sangji University Oriental Hospital), Republic of Korea.

### 4. Participants

Patients with motor abnormality of the neck induced by cervical sprain (n=23).

### 5. Intervention

Arm 1: Spiral taping + acupuncture + Oriental medicine treatment (n=12).

Arm 2: Acupuncture + Oriental medicine treatment (n=11).

### 6. Main outcome measures

Range of motion (ROM).

### 7. Main results

The treatment effect was significant in Arm 2 after 2 rounds and in Arm 1 after 1 round. There was no significant between-group difference, but efficacy was higher in Arm 1 than Arm 2.

### 8. Conclusions

Spiral taping enhanced the effectiveness of treatment for motor abnormality of the neck induced by cervical sprain.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

Though spiral taping is widely used, its efficacy has rarely been studied. This study demonstrated a meaningful clinical effect. However, ROM was the only the outcome measure, and the study design would have been better if VAS and NDI were additionally evaluated. Although the spiral taping is known as safe treatment, a limitation of this study is that skin reaction and clinical adverse events were not evaluated.

### 11. Abstractor and date

Kim HJ, 17 August 2010.

## 19. Injury, Poisoning and Certain Other Consequences of External Causes

### Reference

Kim HS, Kim MK, Hwang JP, et al. The clinical studies for Kinesio taping on patients with nuchal pain caused by traffic accidents. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2008; 18(3): 67–80 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of Kinesio taping<sup>®</sup> on traffic accident patients with nuchal pain.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Cheonan Oriental Hospital of Daejeon University), Republic of Korea.

### 4. Participants

Patients with nuchal pain caused by injuries from traffic accident trauma, with cervical spine deformity on cervical spine X-ray, and hospitalized in Dae-Jeon Oriental Hospital, Department of Oriental Rehabilitation Medicine, between February 2007 and May 2008 (n=40, age=20–55 years).

### 5. Intervention

Arm1: Treatment group (n=20). Acupuncture + Physical therapy + Oriental drug + Kinesio taping<sup>®</sup> (for 48 hours or less, twice a week for 2 weeks, four treatments in total at the sternocleidomastoid, trapezius, and semispinal muscles) (n=20).

Arm 2: Control group. Acupuncture + Physical therapy + Oriental drug therapy (n=20).

### 6. Main Outcome Measures

Pain evaluated on a visual analogue scale (VAS), Pain Rating Score (PRS), Neck Disability Index (NDI).

### 7. Main Results

There was a significant decrease in VAS and NDI scores after 3 days of treatment and PRS score after 6 days of treatment in Arm1 ( $P<0.05$ ). The decrease in VAS and NDI scores was significantly greater in Arm 1 than Arm 2 after 12 days of treatment ( $P<0.05$ ) and the decrease in the PRS score was significantly greater in Arm 1 than Arm 2 after 9 days of treatment ( $P<0.05$ ).

### 8. Conclusions

Kinesio taping with acupuncture provides more relief from nuchal pain caused by traffic accident trauma.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study verified the effectiveness of treatment with Kinesio taping for relief of nuchal pain due to traffic accident trauma. In the treatment group, patients received acupuncture, physical therapy, Oriental drug therapy, and Kinesio taping therapy, twice a week for 2 weeks (4 treatments in total). The VAS, PRS, and NDI scores were evaluated 5 times during hospitalization and showed that Kinesio taping improved the condition of traffic accident patients. In particular, pain reduction was greater later in the course of treatment. It is suggested that treatment with Kinesio taping after acupuncture can increase the treatment effect.

### 11. Abstractor and date

Cho SH, 13 July 2010.

## 19. Injury, Poisoning and Certain Other Consequences of External Causes

### Reference

Jeon TD, Lee HG, Hong SY, et al. The clinical studies for muscle energy techniques on patients with nuchal pain caused by traffic accidents. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2009; 19(1): 125–34 (in Korean with English abstract).

### 1. Objectives

To evaluate the effectiveness of muscle energy techniques for nuchal pain caused by injuries from traffic accident trauma.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Dunsan Oriental Hospital of Daejeon), Republic of Korea.

### 4. Participants

Patients with nuchal pain due to injuries caused by traffic accident trauma, with cervical spine deformity on cervical spine X-ray, and hospitalized in Dae-Jeon Oriental Hospital, Department of Oriental Rehabilitation Medicine, between July 2008 and October 2008 (n=20).

### 5. Intervention

Arm 1: Treatment group (n=10). Acupuncture + Oriental physiotherapy + Oriental drug treatment (Danggwisan (當歸鬚散) + Muscle energy technique (5 times a week, during the Ante Meridiem [AM] hours. applied to the problematic muscle after evaluating the sternocleidomastoid, trapezius, levator scapulae, and scalene muscles.

Arm 2: Control group (n=10). Acupuncture applied to the Jianjing (GB21, 肩井), Jianzhongshu (SI15, 肩中俞), Jianwaishu (SI14, 肩外俞), Shenshu (BL23, 腎俞), Qihai (BL24, 氣海俞), Dachangshu (BL25, 大腸俞), Zhishi (BL52, 志室), Taibai (SP3, 太白), Taiyuan (LU9, 太淵), and Quchi (LI11, 曲池) acupoints + Oriental physiotherapy + Oriental drug treatment (Danggwisan, 當歸鬚散).

### 6. Main Outcome Measures

Scores on the McGill Pain Questionnaire-Short Form (SF-MPQ), visual analogue scale (VAS) for pain, Pain Disability Index (PDI), Neck Disability Index (NDI).

### 7. Main Results

The SF-MPQ sensory subscore, pain VAS, PDI, and NDI scores were significantly decreased in both groups ( $P<0.05$ ). The decrease in VAS and PDI scores were significantly greater in Arm 1 than Arm 2 ( $P<0.05$ ).

### 8. Conclusions

Treatment with the combination of muscle energy with Oriental medicine treatment is more effective than treatment with Oriental medicine alone for nuchal pain caused by injuries due to traffic accident trauma.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the effectiveness of the muscle energy technique for nuchal pain after traffic accident trauma. The SF-MPQ, VAS, PDI and NDI scores were significantly improved in both groups, but treatment in Arm 1 was more effective than treatment in Arm 2 by all measures, especially VAS and PDI scores, which were significantly different between groups. Although PDI and NDI scores reflect ability to perform similar activities of daily life, they are subjective measures and the number of patients was small. An additional clinical trial with a large number of patients for a longer period is needed.

### 11. Abstractor and date

Cho SH, 13 July 2010.

## 19. Injury, Poisoning and Certain Other Consequences of External Causes

### Reference

Ahn CK, Seo JW, Kim SJ. The effect of the 4 imageries of Alexander technique in traffic accident patients with whiplash injuries. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2006; 16(4): 61–72 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of the Alexander technique on patients with whiplash injuries.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Conmaul Oriental Medical Hospital), Republic of Korea.

### 4. Participants

Patients with neck sprain due to traffic accident trauma, hospitalized in Conmaul Oriental Medical Hospital, Department of Oriental Rehabilitation Medicine, between April 2006 and August 2006 (n=23).

### 5. Intervention

Arm 1: Treatment group. Acupuncture applied to the A-shi, Fengchi (GB20, 風池), Jianjing (GB21, 肩井), Dazhui (GV14, 大椎), Fengfu (GV16, 風府), and Fengmen (BL12, 風門) acupoints + Oriental medicine (Whallak-Tang [Huoluotang {活絡湯}])) + Cupping therapy + hot pack + Ultrasound + Interferential Current Therapy (ICT) + Alexander technique (employing 4 images) (n=10).

Arm 2: Control group. Acupuncture applied to the A-shi, Fengchi (GB 20, 風池), Jianjing (GB 21 肩井), Dazhui (GV14, 大椎), Fengfu (GV16, 風府), and Fengmen (UB12, 風門) acupoints + Oriental medicine (Whallak-Tang (Huoluotang {活絡湯})) + Cupping therapy+ hot pack + Ultrasound + ICT (n=13).

### 6. Main Outcome Measures

Neck Disability Index (NDI), pain evaluated on a visual analogue scale (VAS 100 mm).

### 7. Main Results

Treatment significantly decreased NDI and VAS scores in Arm 1 and VAS ( $P<0.05$ ) but not NDI score in Arm 2. There were no between-group differences in these measures.

### 8. Conclusions

The Alexander technique is effective.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study evaluated the efficacy of the Alexander technique (using 4 images) for neck pain from traffic accident trauma. During the 7-day acupuncture treatment, patients in Arm 1 but not Arm 2 were trained to perform the Alexander technique using 4 images (10 minutes/session, total of 5 sessions). Treatment significantly decreased NDI and VAS scores in Arm 1, but there was no significant between-group difference. It is hard to attribute increased pain reduction to the Alexander technique, but it is thought that the Alexander technique had some effect. In the future, more study is needed with large number of subjects to evaluate the effect of mind-body therapy on the musculoskeletal system.

### 11. Abstractor and date

Cho SH, 13 July 2010.



## 19. Injury, Poisoning and Certain Other Consequences of External Causes

### Reference

Song HS. The effect of bee venom acupuncture (BVA) on acute ankle sprain: A randomized controlled trial and double blinding-pilot study. *Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)* 2005; 8(2): 11–6 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of bee venom acupuncture on acute ankle sprain.

### 2. Design

Double-blinded randomized controlled trial (DB-RCT).

### 3. Setting

One Oriental hospital (Kyungwon University Orineal Hospital), Republic of Korea.

### 4. Participants

Patients with acute ankle sprain (n=30).

### 5. Intervention

Arm 1: Bee venom acupuncture group. Bee venom acupuncture applied to the Qiuxu (GB40, 丘墟), Zhongfeng (LR4, 中封), Shangqiu (SP5, 商丘), and Jiexi (ST41, 解溪) acupoints + Acupuncture applied to the Qiuxu (GB40, 丘墟), Zhongfeng (LR4, 中封), Shangqiu (SP5, 商丘), Jiexi (ST41, 解溪), Zusanli (ST36, 足三里), and Yanglingquan (GB34, 陽陵泉) acupoints (n=13).

Arm 2: Control group. Saline acupuncture applied to the Qiuxu (GB40, 丘墟), Zhongfeng (LR4, 中封), Shangqiu (SP5, 商丘), and Jiexi (ST41, 解溪) acupoints + Acupuncture applied to the Qiuxu (GB40, 丘墟), Zhongfeng (LR4, 中封), Shangqiu (SP5, 商丘), Jiexi (ST41, 解溪), Zusanli (ST36, 足三里), and Yanglingquan (GB34, 陽陵泉) acupoints (n=17).

### 6. Main Outcome Measures

Scores on the Ankle-Hindfoot Scale (AHS) and visual analogue scale (VAS) for sprain severity.

### 7. Main Results

The decrease in VAS score was significantly greater after 3 days of treatment in Arm 1 than in Arm 2 ( $P<0.05$ ), and the decrease in VAS score and increase in AHS score were significantly greater after 7 days of treatment in Arm 1 than Arm 2 ( $P<0.05$ ). The decreases in VAS and AHS scores were significantly greater after 7 days than after 3 days of treatment in both groups ( $P<0.05$ ).

### 8. Conclusions

Bee venom acupuncture is more effective than control treatment for acute ankle sprain. Bee venom acupuncture may help reduce the inflammatory reaction caused by soft tissue damage.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

In this study, the effect of bee venom acupuncture at 4 acupoints followed by acupuncture at 6 acupoints on the acute ankle sprain was evaluated by comparing AHS and VAS scores. The improvement in the VAS and AHS scores was more significant in the bee venom group than in the control group.

### 11. Abstractor and date

Cho SH, 13 July 2010.

## 19. Injury, Poisoning and Certain Other Consequences of External Causes

### Reference

Hwang JS, Lim DJ, Hwang JH, et al. Study of the effect of blood-letting cupping treatment for acute ankle sprain: A randomized controlled trial. *Daehan-Chimgu-Hakhoeji (Journal of Korean Acupuncture & Moxibustion Society)* 2005; 22(3): 243–52 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of blood-letting cupping on acute ankle sprain.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Bundang Oriental Hospital of Dongguk University), Republic of Korea.

### 4. Participants

Patients with obvious trauma, excluding fracture, who visited the hospital within 1 week and received no other treatment (n=29).

### 5. Intervention

Arm 1: Blood-letting cupping.

Arm 2: Control.

Out of 29 patients, 19 (11 in Arm 1, 8 in Arm 2) were finally included for analysis.

### 6. Main Outcome Measures

Scores on the Ankle-Hindfoot Scale (AHS) and Numerical Rating Scale (NRS).

### 7. Main Results

Treatment resulted in significantly greater improvement in Arm 1 than Arm 2 (AHS, NRS:  $P=0.041$ ,  $0.026$ ).

### 8. Conclusions

Treatment by blood-letting cupping is effective for acute ankle sprain.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study was a randomized, controlled trial conducted in patients who visited the hospital with acute ankle sprain within 1 week. Patients were allocated to treatment and control groups, and sprain severity was evaluated using AHS and NRS scores. Blood-letting cupping had a significant effect on acute ankle sprain relief, but the small number of subjects is a limitation of this study.

### 11. Abstractor and date

Cho SH, 13 July 2010.

## 19. Injury, Poisoning and Certain Other Consequences of External Causes

### Reference

Lee DY, Kim SJ. Clinical study on the ankle joint traction therapy for ankle sprain. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2005; 15(4): 39-46 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of ankle joint traction therapy on ankle sprain.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Semyung University Oriental Medicine Hospital), Republic of Korea.

### 4. Participants

Patients who visited Se-Myung Oriental Hospital between 1 June 2005 and 31 August 2005 with less than second degree lateral ankle sprain at onset within 48 hours (n=24).

### 5. Intervention

Arm 1: Treatment group. Acupuncture applied to the Qiuxu (GB40, 丘墟), Zulinqi (GB41, 足臨泣), Shenmai (BL62, 申脈), Kunlun (BL60, 崑崙), Xuanzhong (GB39, 懸鐘), Zusanli (ST36, 足三里), Yanglingquan (GB34, 陽陵泉), Shangqiu (SP5, 商丘), Zhaohai (KI6, 照海), Taixi (KI3, 太溪), Sanyinjiao (SP6, 三陰交), Yinlingquan (SP9, 陰陵泉), and Yingu (KI10, 陰谷) acupoints +Ankle joint traction (n=12).

Arm 2: Control group. Acupuncture applied to the Qiuxu (GB40, 丘墟), Zulinqi (GB41, 足臨泣), Shenmai (BL62, 申脈), Kunlun (BL60, 崑崙), Xuanzhong (GB 39 懸鐘), Zusanli (ST36, 足三里), Yanglingquan (GB34, 陽陵泉), Shangqiu (SP5, 商丘), Zhaohai (KI6, 照海), Taixi (KI3, 太溪), Sanyinjiao (SP6, 三陰交), Yinlingquan (SP9, 陰陵泉), and Yingu (KI10, 陰谷) acupoints (n=12).

### 6. Main Outcome Measures

Sprain severity evaluated on a visual analogue scale (VAS).

### 7. Main Results

The between-group difference in VAS was significant at the second and third but not the first round of treatment. The decrease in VAS was significantly greater between first and third rounds in Arm 1 than Arm 2.

### 8. Conclusions

Ankle joint traction therapy combined with acupuncture is more effective than acupuncture only for ankle sprain.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

In traditional Korean medicine, ankle sprain includes foot pain, foot muscle pain, ankle pain, foot distress, accompanied by ache due to swelling caused by extravasated blood and ache due to reddish swelling and bluish bruise. Ankle pain in traditional Korean medicine is treated by HaengKiWhalHyeol (行氣活血, conducting Ki and activating blood) and TongGeyungWhalRak (通經活絡, restoring menstrual flow and activating collateral flow), and SeoGeunWhalRak (舒筋活絡, relaxing muscles and activating collateral flow).

This study evaluated the effect of ankle joint traction on ankle sprain. This treatment combined with acupuncture reduced sprain severity VAS. The reduction in VAS score was significant after the second round of treatment. However, the number of subjects was small, and it is hard to conclude that only 1 week of treatment is effective. Additional study with a large number of patients for a longer term is needed. Moreover, the rehabilitation therapy and strategies for recurrence prevention should be studied.

### 11. Abstractor and date

Cho SH, 13 July 2010.

## 19. Injury, Poisoning and Certain Other Consequences of External Causes

### Reference

Park JM, Yoon MS, Woo I, et al. The effect of ankle meridian tendino-musculature taping on lateral ankle sprain; Randomized controlled clinical study. *Hanbang-Jaehwal-Uihakgwa-Hakhoeji (Journal of Oriental Rehabilitation Medicine)* 2006; 16(1): 63–71 (in Korean with English abstract).

### 1. Objectives

To evaluate the effect of ankle meridian tendino-musculature taping on lateral ankle sprain.

### 2. Design

Randomized controlled trial (RCT).

### 3. Setting

One Oriental hospital (Jaseng Hospital of Oriental Medicine), Republic of Korea.

### 4. Participants

Patients with less than second-degree lateral ankle sprain (onset within 48 hours) who visited the Jaseng Oriental Hospital between 15 November 2004 and 5 August 2005 (n=47).

### 5. Intervention

Arm 1: Treatment group. Acupuncture (So-jul [小節], O-Ho [五虎], Yifeng [TE17, 翳風]) + Ankle meridian tendino-musculature taping + taping therapy around ankle (n=24).

Arm 2: Control group. Acupuncture (So-jul [小節], O-Ho [五虎], Yifeng [TE17, 翳風]) + Ankle meridian tendino-musculature taping (n=23).

### 6. Main Outcome Measures

Severity of sprain evaluated on a visual analogue scale (VAS), ankle circumference measurement.

### 7. Main Results

The decrease in VAS score during the first to fourth treatments was significantly greater in Arm 1 than Arm 2.

### 8. Conclusions

The ankle meridian tendino-musculature taping is effective treatment for varus ankle sprain within 48 hours of onset.

### 9. Safety assessment in the article

Not mentioned.

### 10. Abstractor's comments

This study compares acupuncture with a combination of acupuncture and ankle meridian tendino-musculature taping as treatment for ankle sprain (n=47). VAS and ankle circumference measurement were used to evaluate these treatments. Although ankle meridian tendino-musculature taping significantly improved VAS score and ankle circumference, the number of subjects was small, which is a limitation of this study. Moreover, there were no between-group differences after the 5<sup>th</sup> treatment and it was impossible to determine the incidence of chronic ankle instability and recurrence.

### 11. Abstractor and date

Cho SH, 13 July 2010.