13. Diseases of the Musculo Skeletal System and Connective Tissue

Reference

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 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±1.5 in BVP vs. -3.1±1.0 in WN), KWOMAC total score (-14.4±8.4 in BVP vs. -9.1±6.4 in WN) and function subscore (-11.1±5.9 in BVP vs. -6.3±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±7.1 in BVP vs. -9.7±5.3 in WN), physical health score (-15.1±9.2 in BVP vs. -13.2±8.1 in WN), and mental health score (-8.4±8.6 in BVP vs. -7.0±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.