

## 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.