

**14. Genitourinary Tract Disorders (including Climacteric Disorders)****Reference**

Sakamoto Y, Iwasaki M, Kazama T, et al. Study of effects hachimi-jio-gan and chorei-to on prostatic hypertrophy. *Dai 13 Kai Hinyokika Kampo Kenkyukai Koen Shu (Proceedings of the 13th Meeting of the Urological Society for Kampo Medicine)* 1996: 7-14 (in Japanese with English abstract).

**1. Objectives**

To evaluate the efficacy of hachimijiogan (八味地黄丸) and choreito (猪苓湯) in patients with prostatic hyperplasia.

**2. Design**

Randomized controlled trial using sealed envelopes for allocation (RCT-envelope).

**3. Setting**

One university hospital and three hospitals, Japan.

**4. Participants**

Fifty-three patients with prostatic hyperplasia who were enrolled from May 1992 to April 1994.

**5. Intervention**

Arm 1: TSUMURA Hachimijiogan (八味地黄丸) Extract Granules for Prescription 2.5 g t.i.d., for 8 weeks (n= 27 patients, 15 patients analyzed; 12 patients excluded from the analysis, including 2 patients with worsening symptoms).

Arm 2: TSUMURA Choreito (猪苓湯) Extract Granules for Prescription 2.5 g t.i.d., for 8 weeks (n=26 patients, 14 patients analyzed; 12 patients, most of whom failed to return to the hospital, were excluded).

No concomitant use of drugs for urinary disturbance was allowed.

**6. Main outcome measures**

Subjective symptoms and objective findings before and after treatment.

**7. Main results**

Significant subjective improvement was observed in six symptoms (delayed urination, prolonged urination, weak urinary stream, feeling of residual urine, and urination within 2 hours) after treatment with hachimijiogan and in two symptoms (prolonged urination and feeling of residual urine) after treatment with choreito. Significant objective improvement was observed in the maximum and mean urinary flow rates after treatment with hachimijiogan ( $P<0.01$ ) and choreito ( $P<0.05$ ).

**8. Conclusions**

According to the investigators, both drugs are useful in 80% of patients. Even if all of the patients excluded from the analysis were included in the analysis and were unresponsive, the utility rate would be 40%, indicating that both drugs are moderately useful in improving subjective symptoms associated with prostatic hyperplasia.

**9. From Kampo medicine perspective**

None.

**10. Safety assessment in the article**

Appetite loss was observed in 1 patient treated with hachimijiogan, and sleepiness and stomach discomfort were observed in 2 patients treated with choreito.

**11. Abstractor's comments**

According to the "Abstract" and "Discussion", this study evaluated the efficacy of individual Kampo medicines for urinary disturbance in order to determine whether combinations of these drugs with western medications for urinary disturbance (antiandrogenic agents,  $\alpha$ -blockers, plant extracts, amino acid preparations, etc.) were useful. Good results were obtained, showing that hachimijiogan and choreito are meaningful concomitant drugs. According to the "Methodology" and "Analytical Methods" sections, patients were randomly assigned to one of two groups. The absence of significant between-group differences was not mentioned in the Abstract or Discussion. Since this was an RCT, a group of patients treated with both drugs should have been included.

**12. Abstractor and date**

Fujisawa M, 13 October 2008, 6 January 2010, 1 June 2010, 31 December 2013.