

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

Horiba M, Kato S, Tanaka T, et al. Clinical validity of gosha-jinki-gan in the treatment of chronic prostatitis - open comparative study with gosha-jinki-gan vs ciprofloxacin -. *Gendai Toyo Igaku (The Journal of Traditional Sino-Japanese Medicine)* 1994; 15: 37-44 (in Japanese).

**1. Objectives**

To evaluate the efficacy and safety of goshajinkigan (牛車腎気丸) in the treatment of chronic prostatitis.

**2. Design**

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

**3. Setting**

One hospital, Japan.

**4. Participants**

Fifty-eight patients with chronic prostatitis.

**5. Intervention**

Arm 1: TSUMURA Goshajinkigan (牛車腎気丸) Extract Granules 2.5 g t.i.d. for 4 weeks (n=15).

Arm 2: ciprofloxacin 200 mg b.i.d. for 4 weeks (n=15).

Arm 3: TSUMURA Goshajinkigan (牛車腎気丸) Extract Granules 2.5 g t.i.d. + ciprofloxacin 200 mg b.i.d. for 4 weeks (n=14).

Arm 4: serratiopeptidase 10 mg t.i.d. for 4 weeks (n=14).

**6. Main outcome measures**

Subjective symptoms, prostate palpation findings, and white blood cell (WBC) in expressed prostatic secretion.

**7. Main results**

The analysis population consisted of a total of 48 patients: 14, 13, 9, and 12 patients in arm 1, arm 2, arm 3, and arm 4, respectively. Subjective symptoms were improved in 60.0%, 54.5%, 68.1%, and 33.3% of patients in arms 1 to 4, respectively, at 2 weeks; and in 80.0%, 66.7%, and 71.4% of patients in arms 1 to 3, respectively, at 4 weeks. Prostate palpation findings were improved in 21.5%, 10.0%, 14.3%, and 20.0% of patients in arms 1 to 4, respectively, at 2 weeks; and in 28.6%, 11.1%, and 44% of patients in arms 1 to 3, respectively, at 4 weeks. Normalization of WBC count in expressed prostatic secretion was noted in 12.5%, 11.1%, 28.6%, and 12.5% of patients in arms 1 to 4, respectively, at 2 weeks; and 30%, 12.5%, and 16.7% in arms 1 to 3, respectively, at 4 weeks. The efficacy rate judged by investigators was 85.7%, 63.6%, 88.8%, and 25% in arms 1 to 4, respectively, showing significantly higher efficacy in arm 1 than in arm 4 ( $P<0.05$ ). As well, higher efficacy was obtained in arm 3 than in arm 4 ( $P<0.05$ ).

**8. Conclusions**

It was suggested that Goshajinkigan is effective for chronic prostatitis.

**9. From Kampo medicine perspective**

Mentioned in the discussion section of the reference.

**10. Safety assessment in the article**

Mild adverse drug reactions were observed in 6 and 1 patient receiving ciprofloxacin and goshajinkigan, respectively, for a total of 7. The reactions were gastrointestinal symptoms, central nervous system symptoms, and allergic symptoms occurring in 3, 3, and 1 patient, respectively. The adverse reaction to goshajinkigan was intraoral inflammation in 1 patient.

**11. Abstractor's comments**

Although using seal envelopes for allocation is likely to have compromised randomization, this clinical trial demonstrated the efficacy of goshajinkigan for chronic prostatitis. A future randomized controlled trial is expected to be performed and to use an improved method of randomized allocation, statistical analysis of results, more objective variables, and larger sample size.

**12. Abstractor and date**

Okabe T, 28 August 2008, 1 June 2010, 31 December 2013.