

**1. Infections (including Viral Hepatitis)****Reference**

Miura Y, Yamagishi Y, Mikamo H, et al. Investigation into the effects of Kampo therapy for infectious diarrhea\*. *Sanfujinka Kampo Kenkyu no Ayumi (Recent Progress of Kampo Medicine in Obstetrics and Gynecology)* 2011; 28: 102–4 (in Japanese). Ichushi Web ID: 2011211647

**1. Objectives**

To evaluate the effectiveness of Kampo therapy for infectious diarrhea.

**2. Design**

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

**3. Setting**

Izumi Ladies' Clinic, Japan.

**4. Participants**

Thirty-three patients who presented with watery diarrhea between September 2007 and March 2009 and were diagnosed with infectious gastroenteritis caused by norovirus, identified from stool samples using a rapid testing method.

**5. Intervention**

Arm 1: goreisan (五苓散) (manufacturer not identified) 2.5 g t.i.d. (n=11).

Arm 2: goreisan (五苓散) (manufacturer not identified) 2.5 g t.i.d. + Shakuyakukanzoto (芍薬甘草湯) (manufacturer not identified) 2.5 g t.i.d. (n=11).

Arm 3: no Kampo therapy (n=11).

**6. Main outcome measures**

Time to dissipation of vomiting, diarrhea, and abdominal pain.

**7. Main results**

Time until vomiting dissipated was  $79.1 \pm 27.5$  minutes in Arm 1 (mean  $\pm$  S.D. and the same below),  $83.6 \pm 20.1$  minutes in Arm 2, and  $1701.8 \pm 377.2$  minutes in Arm 3. Time until diarrhea dissipated was  $110.0 \pm 30.0$  minutes in Arm 1,  $129.5 \pm 28.6$  minutes in Arm 2, and  $1728.2 \pm 352.0$  minutes in Arm 3. Time until abdominal pain dissipated was  $122.3 \pm 26.5$  minutes in Arm 1,  $105.0 \pm 16.0$  minutes in Arm 2, and  $1813.6 \pm 357.1$  minutes in Arm 3.

**8. Conclusions**

Goreisan and shakuyakukanzoto are effective for vomiting, diarrhea, and abdominal pain due to infectious diarrheal disease caused by norovirus.

**9. From Kampo medicine perspective**

None.

**10. Safety assessment in the article**

Not mentioned.

**11. Abstractor's comments**

This clinical trial investigated the therapeutic effects of goreisan and shakuyakukanzoto for infectious diarrheal disease caused by norovirus. It is difficult to assess the therapeutic effects of Kampo medicines on acute-stage diseases, particularly because patients do not return for examination after improvement. In that sense, this is a valuable clinical study as it elucidates the effectiveness of Kampo medicines for an acute-stage disease. Yet, notwithstanding that this written report has the form of an academic article, no mention is made of patient background (age and gender, etc.), the period between onset and examination, and the number (if any) of dropouts. Furthermore, time until dissipation of symptoms are clearly different between the Arms (goreisan, goreisan and shakuyakukanzoto, and no Kampo medicine), but the statistics are not analyzed, meaning there is no mention of significant differences. It is a worthwhile clinical study, so, the authors should have included these details in their article. Yet, the study can rightly be considered excellent because acute-stage disease cannot be easily monitored following therapy, and because it focuses attention on the question of whether Kampo medicines are effective for norovirus infection, a disease without very effective treatment. Hopefully this study will lead to others that examine larger numbers of cases.

**12. Abstractor and date**

Goto H, , 31 December 2012.