11. Gastrointestinal, Hepato-Biliary-Pancreatic Diseases

Reference

Tokashiki R, Okamoto I, Funato N, et al. Rikkunshito improves globus sensation in patients with proton-pump inhibitor-refractory laryngopharyngeal reflux. *World Journal of Gastroenterology* 2013; 19: 5118-24. Pubmed ID: 23964146

1. Objectives

To evaluate the efficacy and safety of rikkunshito (六君子湯) for proton-pump inhibitor (PPI)-refractory laryngopharyngeal reflux (LPR).

2. Design

Randomized controlled trial (RCT).

3. Setting

Single facility (university hospital otorhinolaryngology department), Japan.

4. Participants

In total, 22 patients with PPI-refractory LPR aged 20-76, between March 2007 and December 2008.

5. Intervention

Following administration of lansoprazole (30 mg) once daily for 2 weeks, patients with LPR symptoms and at least a score of 3 for acid reflux, abdominal pain, and dyspepsia on the gastrointestinal symptom rating scale (GSRS) were assigned to two groups using the envelope method. Excluded from the study were patients taking psychoactive or other gastrointestinal drugs, during pregnancy, breastfeeding mothers, and patients with sinusitis, asthma, or organic disease.

Arm 1: TSUMURA Rikkunshito (六君子湯) (2.5 g t.i.d) alone for four weeks (n=11).

Arm 2: TSUMURA Rikkunshito (六君子湯) (2.5 g t.i.d) plus lansoprazole (30 mg/day) for four weeks (n=11).

Outcome measures were compared before and four weeks after administration.

6. Main outcome measures

(1) LPR symptoms (globus sensation, sore throat, and excessive laryngeal care) were assessed using a Visual Analogue Scale (VAS). (2) Gastrointestinal symptoms were assessed on the GSRS (comprised of five domains including abdominal and reflux symptoms). (3) Gastric emptying was assessed with a radio-opaque marker (carried out on 18 patients).

7. Main results

LPR symptoms (VAS score) decreased significantly in both groups after four weeks, but there was no significant difference between the groups. Of the LPR symptoms, sore throat decreased significantly in the rikkunshito plus PPI group compared to the rikkunshito-alone group, however, there was no significant difference between the two groups for excessive laryngeal care. Gastrointestinal symptoms decreased significantly on the GSRS in both groups. Gastric emptying improved in the rikkunshito-alone group, but there was no significant before-after difference, while significant improvement was observed in the rikkunshito plus PPI group, however, there was no significant difference between the two groups. Examination of the relation between gastric emptying and globus sensation improvement found a significant correlation between the two.

8. Conclusions

Rikkunshito is effective for PPI-refractory LPR (especially globus sensation). Gastric emptying capacity may be involved in the mechanism of action.

9. From Kampo medicine perspective

None.

10. Safety assessment in the article

No adverse event or reaction was observed during the protocol period.

11. Abstractor's comments

While PPI is effective for LPR, quite a few patients do not respond. The protocols for this study provided for a two-week PPI administration period before non-responsive patients were randomly assigned to a rikkunshito-alone group or a PPI combined with rikkunshito group for the four-week clinical trial, which made for a highly precise design. As well as obtaining significant clinical outcomes in relation to efficacy, the authors suggest the involvement of improvement in gastric emptying in the mechanism of action. Hopefully the authors will carry out further clinical trials with larger samples in future.

12. Abstractor and date

Kogure T, 31 March 2017.