Task Force for Evidence Reports / Clinical Practice Guideline Committee for EBM, the Japan Society for Oriental Medicine

11. Gastrointestinal, Hepato-Biliary-Pancreatic Diseases

Reference

Takagaki Y, Kawasaki S, Komai H, et al. The effect of Chinese hearb medicine (dai-kenchu-to) on paralytic ileus after repair of abdominal aortic aneurysm. Nihon Rinsho Geka Gakkai Zasshi (Journal of Japan Surgical Association) 2000; 61: 325-8 (in Japanese with English abstract). J-STAGE

1. **Objectives**

To evaluate the efficacy and safety of daikenchuto (大建中湯) for improving intestinal peristalsis in patients with intestinal paralysis after surgery for abdominal aortic aneurysm (AAA).

2. Design

Randomized controlled trial (RCT).

Setting 3.

No description of the setting is available (the authors are cardiovascular surgeons at community or university hospitals), Japan.

4. **Participants**

Twenty-one patients who underwent elective surgery for non-ruptured infrarenal AAA during the same time period.

5. Intervention

- Arm 1: treatment with infusion of daikenchuto (大建中湯) dissolved in lukewarm water (5 g/20 mL) through a gastric tube, followed by clipping of the tube for 30 minutes, three times daily from the first postoperative day, in 7 patients.
- Arm 2: treatment with infusion of lukewarm water (20 mL) in the same manner as arm 1 in 7 patients, as a control group.
- Arm 3: treatment with infusion of lukewarm water (20 mL) and intravenous panthenol (100 mg/day) in 7 patients.

6. Main outcome measures

Degree of abdominal distension, and presence or absence of bowel sounds, passage of flatus, and small bowel gas on the abdominal X-ray.

7. Main results

Bowel sounds were heard immediately after the infusion of the study drug in all patients of arm 1, but not in any patient of arms 2 and 3. Time to the first passage of flatus after surgery was 3.1±0.8 days in arm 1, 5.1±1.3 days in arm 2, and 3.7±0.8 days in arm 3; significantly earlier passage of flatus was observed in arms 1 and 3 (P<0.05), but there was no significant difference in time to first passage of flatus between these two arms. Small bowel gas disappeared at 3.3 ± 1.4 days after surgery in arm 1, at 6.1 ± 1.2 days in arm 2, and at 6.3 ± 2.8 days in arm 3; the gas disappeared significantly earlier in arm 1 than in arms 2 and 3 (P < 0.05). No patients developed symptoms of ileus due to decreased intestinal peristalsis after resumption of oral intake.

8. Conclusions

Oral daikenchuto is effective for improving decreased intestinal peristalsis after surgery for non-ruptured AAA.

9. From Kampo medicine perspective None.

10. Safety assessment in the article

Adverse drug reactions associated with daikenchuto treatment were not reported.

11. Abstractor's comments

AAA is caused by arteriosclerosis and common in the elderly, for whom elective surgery is indicated and achieves good outcome. In such cases, early ambulation and early resumption of oral intake are important for the prevention of early postoperative delirium. Administration of daikenchuto promotes significantly earlier recovery of intestinal peristalsis and is therefore clinically useful. Although three arms were compared in this study, other studies commonly compare just two arms - daikenchuto and panthenol as a standard treatment. This study was also limited by the small number of patients in each group. Thus, a review of the study design and number of subjects will be needed.

12. Abstractor and date

Arai M, 15 June 2007, 1 April 2008, 1 June 2010, 31 December 2013.