

**19. Injury, Poisoning, and Postoperative Pain****Reference**

Fukuda Y, Azuma M, Novel pain reliever shakuyaku-kanzo-to after hemorrhoidectomy, *Journal of the Japan Society of Coloproctology*, 2014; 67: 324-9. Ichushi Web ID: 2014256564 [J-STAGE](#)

**1. Objectives**

To evaluate pre-and post-operative analgesic effects of shakuyakukanzoto (芍薬甘草湯) for treatment of pain after hemorrhoidectomy.

**2. Design**

Randomized controlled trial (RCT).

**3. Setting**

One clinic, Japan.

**4. Participants**

A total of 103 patients who visited the clinic after hemorrhoidectomy between April 2011 and September 2012.

**5. Intervention**

Arm 1: TSUMURA Shakuyakukanzoto (芍薬甘草湯) Extract Granules administered orally at 2.5 g t.i.d. before meals before and after hemorrhoidectomy for 14 days (n=34).

Arm 2: TSUMURA Shakuyakukanzoto (芍薬甘草湯) Extract Granules administered orally at 2.5 g t.i.d. before meals only after hemorrhoidectomy for 7 days (n=37).

Arm 3: No treatment with TSUMURA Shakuyakukanzoto (芍薬甘草湯) Extract Granules (n=32).

**6. Main outcome measures**

Maximum pain scored on a visual analogue scale (VAS).

**7. Main results**

Over a 7-day post-operative period, the pain VAS score was significantly lower in Arm 1 than in Arm 3 ( $P<0.05$ ) on Day 2 after hemorrhoidectomy; in Arm 2 than in Arm 3 on Day 5 after hemorrhoidectomy ( $P<0.05$ ); and in Arm 1 than in Arm 3 ( $P<0.05$ ) on the day of hemorrhoidectomy. If VAS score of 3 or lower is defined as pain relief, the mean time to achieving pain relief was significantly shorter in Arm 1 than in Arm 3 ( $P<0.05$ ). The degree of pain alleviation was higher in Arm 1 than in Arm 3 on Day 6, but not in Arm 2 than in Arm 3, although it tended to be higher in Arm 2.

**8. Conclusions**

Pre- and post-operative treatment with shakuyakukanzoto is effective for pain alleviation after hemorrhoidectomy.

**9. From Kampo medicine perspective**

None.

**10. Safety assessment in the article**

No evident adverse events were noted.

**11. Abstractor's comments**

This article demonstrated that continuous treatment with shakuyakukanzoto at the start of the pre-operative period is effective for post-operative pain alleviation. Although partial alleviation of pain was noted after the post-operative treatment, it is interesting that pre- and post-operative treatment was more effective. In general, since the effect of shakuyakukanzoto is apparent immediately after administration, it is also used as needed. As stated in the Discussion, careful monitoring is needed to prevent Glycyrrhiza-induced pseudoaldosteronism after continuous treatment. Since post-hemorrhoidectomy pain is most severe on the day of surgery, it is meaningful that oral administration of shakuyakukanzoto before the pain developed was more effective. Interestingly, mechanisms of pain development (increase in anal resting pressure and spasm of the anal sphincter) may explain why shakuyakukanzoto tended to be more effective in male and young subjects.

**12. Abstractor and date**

Nakata H, 31 March 2017.