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

18. Symptoms and Signs

Reference

Kishida Y, Miki H, Nishii T, et al. Therapeutic effects of Saireito (TJ-114), a traditional Japanese herbal medicine, on postoperative edema and inflammation after total hip arthroplasty. *Phytomedicine* 2007; 14: 581-6. CENTRAL ID: CN-00609214, Pubmed ID: 17292595

1. Objectives

To investigate the efficacy and safety of saireito (柴苓湯) on postoperative edema and inflammation after total hip arthroplasty (THA).

2. Design

Randomized controlled trial (RCT).

3. Setting

Two departments (Department of Kampo Medicine and Department of Orthopaedic Surgery) of Osaka University, and one hospital, Japan.

4. Participants

Female patients who underwent THA because of unilateral osteoarthritis, n=17.

5. Intervention

Arm 1: Tsumura Saireito (柴苓湯) Extract Granules 9.0 g/day for 2 days before surgery and for 2 weeks after surgery, n=8.

Arm 2: no administration, n=9.

6. Main outcome measures

The circumference of the lower limb at three locations (the lower leg, ankle, and forefoot), Merle d'Aubigne hip score for clinical evaluation including pain, and serum C-reactive protein (CRP) level.

7. Main results

At three weeks after surgery, the circumference of the lower leg was less in arm 1 than in arm 2. The serum CRP level became negative by 2 weeks after surgery in 6 of 8 patients in arm 1 and in 0 of 9 patients in arm 2 (P<0.001).

8. Conclusions

Administration of saireito is suggested to reduce postoperative lower leg edema and inflammation after THA.

9. From Kampo medicine perspective

None.

10. Safety assessment in the article

No adverse effects were reported in arm 1 and documented in arm 2.

11. Abstractor's comments

This study suggests the efficacy of saireito for postoperative lower leg edema after THA. In this trial, all patients had a pneumatic foot compression device and wore compression stockings concurrently to prevent postoperative lower leg swelling. This study also indicated that saireito is effective in decreasing postoperative inflammation. All patients received an intravenous infusion of prophylactic antibiotics for 4 days, subsequently oral antibiotics for 4 days, and nonsteroidal anti-inflammatory drugs (NSAIDs) for 1 week after surgery. However, CRP level remained positive in all subjects in arm 2, two weeks after surgery. In general, a few days' treatment with antibiotics should lead to a negative CRP level by two weeks after surgery. Further clinical studies with more patients and fewer concomitant therapies for knee replacement arthroplasty and bipolar hip arthroplasty are awaited and anticipated.

12. Abstractor and date

Okabe T, 11 December 2008, 1 June 2010, 31 December 2013.