

13. Diseases of the musculoskeletal system and connective tissue**Reference**

Majima T, Inoue M, Kasahara Y, et al. Effect of the Japanese herbal medicine, boiogito, on the osteoarthritis of the knee with joint effusion. *Sports Medicine Arthroscopy Rehabilitation Therapy & Technology* 2012; 4: 1-6. Pubmed ID: 22230247

1. Objectives

To evaluate the efficacy and safety of boiogito (防已黄耆湯), a Kampo medicine for gonarthrosis with joint effusion.

2. Design

Randomized controlled trial (RCT).

3. Setting

Hokkaido University Hospital, Japan.

4. Participants

Forty-seven gonarthrosis patients with clinically confirmed joint effusion.

5. Intervention

Arm 1: Combined group: TSUMURA Boiogito (防已黄耆湯) Extract Granules (2.5 g t.i.d.) before meals and loxoprofen (60 mg t.i.d.) after meals for 12 weeks (n=24).

Arm 2: Loxoprofen group: Loxoprofen (60 mg t.i.d.) after meals for 12 weeks (n=23).

6. Main outcome measures

Knee score (Knee Society Rating System), function score (Knee Society Rating System), joint effusion volume, and evaluation of health status and joint symptoms using the 36-item short form health survey (SF-36).

7. Main results

Knee scores (Knee Society Rating System) improved significantly in both arms, while the function score (Knee Society Rating System) improved significantly in arm 1 but not in arm 2. SF-36 Physical Function scores improved significantly in both groups, but scores for the other seven domains showed no significant improvement. Joint effusion volume decreased significantly in arm 1 after four weeks, but not in arm 2.

8. Conclusions

Boiogito may be an effective conservative therapy for gonarthrosis with joint effusion.

9. From Kampo medicine perspective

None.

10. Safety assessment in the article

One participant in the combined group showed signs of oral dryness, but it was slight and improved after discontinuation of the drugs.

11. Abstractor's comments

This is the first clinically significant paper on an RCT demonstrating the add-on effect of boiogito with loxoprofen for gonarthrosis with joint effusion. The paper looked for significant between-group differences in before-after comparisons; however, it might also have been able to objectively demonstrate the efficacy of boiogito if it had included an examination of the stochastic differences between the two groups. Further research is anticipated.

12. Abstractor and date

Kogure T, 31 December 2013.