#### **Evidence Reports of Kampo Treatment**

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

## 21. Others

#### Reference

Ai M. Assessment of the antipasmodic effect of peppermint oil and Shakuyaku-kanzon-to (TJ-68); a Chinese herbal medicine on the clonic wall. *Medical Tribune Online (Digestive Disease Week: DDW)* 2005: 10-1 (in Japanese).

# 1. Objectives

To evaluate the efficacy of directly sprayed shakuyakukanzoto (芍薬甘草湯) on large bowel spasm.

# 2. Design

Randomized controlled trial (RCT).

## 3. Setting

Single facility (university), Japan.

## 4. Participants

One-hundred and thirty-one patients scheduled to undergo large bowel endoscopy for polyp surveillance, etc.

## 5. Intervention

Arm 1: shakuyakukanzoto (芍薬甘草湯) group (0.5 g of TSUMURA Shakuyakukanzoto (芍薬甘草湯) Extra Granules dissolved in physiological saline to make 50 mL [concentration: 10 g/L]).

Arm 2: peppermint oil group (0.4 mL of peppermint oil and 0.05 g of sorbitan fatty acid ester dissolved in water to make 50 mL [concentration: 8 mL/L]).

Arm 3: Physiological saline group.

In all arms, conventional fluoroscopy (CF) was performed in the left lateral position, and the contraction ring in the gastric antrum was sprayed, kept 1 cm from the tip of the endoscope inserted 20–25 cm from the anus.

#### 6. Main outcome measures

Contraction ring lumen area (presented as the number of pixels on videotaped digital images of contraction-relaxation motions of the contraction ring during the 3-min period beginning before and ending after each drug was sprayed), and area under the expanded area-time curve.

# 7. Main results

Lumen area was significantly larger in the shakuyakukanzoto group and peppermint oil group than in the physiological saline group. The area under the expanded area-time curve was also significantly larger in both treatment groups than in the physiological saline group. There was no difference in outcome measures between the shakuyakukanzoto group and peppermint oil group.

#### 8. Conclusions

Shakuyakukanzoto and peppermint oil have comparable large intestinal wall-relaxing activity.

# 9. From Kampo medicine perspective

None.

## 10. Safety assessment in the article

Not mentioned.

#### 11. Abstractor's comments

Direct spray of large intestinal wall with shakuyakukanzoto may be applicable as an antispastic in the CF test.

# 12. Abstractor and date

Kogure T, 15 June 2007, 1 April 2008, 31 December 2013.