

11. Diseases of the Digestive System

Reference

Son DH, Joh KH, Kim YS, The comparison study on the effect of bowel movement between Bo-Ryu Enema (保留灌腸, Bao-Liu Enema) and general enema in patients at the acute stage of cerebrovascular accident. *Daehan-Hanbang-Naegwa-Hakhoeji (Korean Journal of Oriental Internal Medicine)* 2001; 22(3): 51–62 (in Korean with English abstract).

1. Objectives

To compare the effect of the Bo-Ryu enema (Bao-Liu enema) with that of general (conventional) enema in patients with acute stroke.

2. Design

Randomized controlled trial (RCT).

3. Setting

One Oriental hospital (Oriental Medical Hospital at Jeonju, Woosuk University), Republic of Korea.

4. Participants

Acute stroke patients who have gone 3 days without defecating, or less than 3 days with abdominal discomfort and satiety (n=63; male/female=34/29).

5. Intervention

Bo-Ryu enema:

Arm 1: Administration of a Finger glycerin enema 1 hour before the Bo-Ryu enema (200 cc of Daeseungkitang [大承氣湯] in two volumes of water boiled before use). One round was performed in the morning and one in the afternoon. (n=10)

Arm 2: Same as Arm 1, except only one round was performed. (n=19)

General enema:

Arm 3: Administration of a Finger-glycerin enema once in the morning and once in the afternoon. (n=16)

Arm 4: Administration of a Finger-glycerin enema once in the morning. (n=18)

6. Main outcome measures

Defecation frequency, stool volume, change in abdominal examination (level of tension in the rectus abdominis muscle, change in the abdominal strength), change in relevant symptoms (abdominal discomfort, digestion state, physical strength).

7. Main results

The Bo-Ryu enema was more effective than the general enema for increasing defecation frequency, total stool volume, corrected stool volume, abdominal strength, and physical strength. The increase in defecation frequency and abdominal strength was greater in Arm 1 than Arm 2 and the increase in corrected stool volume and decrease in abdominal discomfort was greater in Arm 2 than Arm 1.

8. Conclusions

The Bo-Ryu enema is more cathartic than the general enema: it reduces the level of tension in the rectus abdominis muscle and relieves the abdominal discomfort.

9. Safety assessment in the article

The enemas had no effect on body temperature, respiratory rate, blood pressure, and pulse rate, which were remained within normal range.

10. Abstractor's comments

This randomized, controlled study compared the efficacy of the Bo-Ryu enema with that of the general enema in acute stage stroke patients. The subjects were divided into 4 groups according to enema type and frequency. The Bo-Ryu enema was more effective than the glycerin enema in increasing defecation frequency and stool volume, and in changing tension and strength of the abdominis rectus and relevant symptoms. Nonetheless, there were limitations: the method used to evaluate the level of tension in rectus abdominis muscle was insufficient, errors occurred in subject allocation, and the methods used to evaluate the main outcome measures were unclear.

11. Abstractor and date

Kim JS, 12 July 2010.