

**10. Respiratory Diseases (including Influenza and Rhinitis)****References**

Iwasaki K, Kato S, Monma Y, et al. A pilot study of banxia houpu tang, a traditional Chinese medicine, for reducing pneumonia risk in older adults with dementia. *Journal of the American Geriatrics Society* 2007; 55: 2035-40. CENTRAL ID: CN-00699802, Pubmed ID: 17944889

Iwasaki K, Kato S, Monma Y, et al. A pilot study of banxia houpu tang, a traditional Chinese medicine, for reducing pneumonia risk in brain-damaged elderly. *International Journal of Stroke* 2010; 5 suppl 2: 38-9. CENTRAL ID: CN-00782273

**1. Objectives**

To evaluate whether hangekobokuto (半夏厚朴湯) prevents aspiration pneumonia and pneumonia-related mortality in elderly people with dementia.

**2. Design**

Randomized controlled trial (RCT).

**3. Setting**

Two hospitals (the authors belong to Tohoku University, Dokkyo University, and two hospitals), Japan.

**4. Participants**

One hundred and four elderly people with cerebrovascular disease, Alzheimer's disease, or Parkinson's disease (31 males, 73 females, mean age 83.5±7.8 years).

**5. Intervention**

Ninety-five participants were randomly allocated to two groups for treatment.

Arm 1: Tsumura Hangekobokuto (半夏厚朴湯) Extract Granules 2.5 g t.i.d. (body weight ≥50 kg) or 2.5 g b.i.d. (body weight <50 kg) for 12 months, n=47.

Arm 2: placebo (lactose) 1.0 g t.i.d. (body weight ≥50 kg) or 1.0 g b.i.d. (body weight <50 kg) for 12 months, n=48.

**6. Main outcome measures**

The occurrence of pneumonia, mortality due to pneumonia, and amount of oral food intake.

**7. Main results**

Data from 92 of the 95 subjects were analyzed. One of four patients who developed pneumonia in arm 1 died as a result, whereas 6 of 14 patients who developed pneumonia in arm 2 died as a result. There was a significant decrease in pneumonia onset in arm 1 compared to arm 2 ( $P=0.008$ ). Mortality related to pneumonia tended to be less in arm 1 than in arm 2 ( $P=0.05$ ). Hangekobokuto (半夏厚朴湯) reduced the relative risk of pneumonia to 0.51 (95% CI: 0.27–0.84) and death by pneumonia to 0.41 (95% CI: 0.10–1.03). Amount of oral food intake was significantly greater in arm 1 than arm 2 ( $P=0.06$ ).

**8. Conclusions**

Treatment with hangekobokuto (半夏厚朴湯) reduces the risk of pneumonia in elderly people with cerebral disorder. The results also suggest that hangekobokuto (半夏厚朴湯) administration is effective in sustaining food intake.

**9. From Kampo medicine perspective**

None.

**10. Safety assessment in the article**

No adverse effects were observed.

**11. Abstractor's comments**

The findings of this well-designed randomized controlled study suggest the efficacy of hangekobokuto in preventing aspiration pneumonia in elderly people with dementia. In addition, hangekobokuto administration tended to improve activities of daily living such as self-feeding and to reduce the number of febrile days. Further studies to assess these points are expected. In Kampo medicine, hangekobokuto is a therapeutic prescription indicated for nonfebrile patients with *tan'in* (痰飲, fluid retention) pattern. However, many elderly people present with *sosho* (燥証, dryness pattern). Hopefully, the researchers will analyze the data from this study from the perspective of patterns, once the patterns of the 95 elderly participants in this study become available.

**12. Abstractor and date**

Okabe T, 25 November 2008, 1 June 2010, 31 December 2012.