

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

Iwasaki K, Cyong JC, Kitada S, et al. A traditional Chinese herbal medicine, banxia houp tang, improves cough reflex of patients with aspiration pneumonia. *Journal of American Geriatrics Society* 2002; 50: 1751-2. CENTRAL ID: CN-00434022, Pubmed ID: 12366640

1. Objectives

To investigate whether hangekobokuto (半夏厚朴湯; banxia houp tang) improves cough reflex in elderly patients likely to have aspiration pneumonia.

2. Design

Randomized controlled trial (RCT).

3. Setting

University of Tokyo and Tohoku University, and their related facilities, Japan.

4. Participants

Elderly patients (mean age, 78) with cerebral atrophy and lacunar infarcts, who had at least one episode of aspiration pneumonia, n=16.

5. Intervention

Arm 1: hangekobokuto (半夏厚朴湯) extract (granules) 1.5 g t.i.d. orally for 4 weeks (n=7).
Arm 2: placebo (lactose) 1.5 g t.i.d. orally for 4 weeks (n=9)

6. Main outcome measures

Subjects inhaled nebulized citric acid solution (0.3-360 mg/mL) delivered by an ultrasonic nebulizer, and the cough threshold was defined as the concentration of citric acid at which subjects coughed at least five times.

7. Main results

In arm 1, the cough threshold decreased from 59.5 to 15.7. In arm 2, the values were 47.5 and remained unchanged.

8. Conclusions

The result suggests that hangekobokuto improves the (impaired) cough reflex in the elderly with an increased risk for aspiration pneumonia.

9. From Kampo medicine perspective

None.

10. Safety assessment in the article

Not documented.

11. Abstractor's comments

It has been reported that angiotensin-converting enzyme inhibitor (ACE-I) improves silent aspiration, and that capsaicin improves cough reflex. This study suggests that hangekobokuto also affects the attenuated cough reflex in older patients with cerebral atrophy and lacunar infarcts. Larger RCTs to confirm its efficacy are awaited.

12. Abstractor and date

Okabe T, 15 June 2007, 1 April 2008, 1 June 2010.