

1. Infections (including Viral Hepatitis)**Reference**

Suzuki J, Arata S, Sugiyama M. Improvement of immunity and nutrition by hochuekkito in immuno-compromised hosts – for the control of MRSA –*. *Progress in Medicine* 2002; 22: 1362-3 (in Japanese). Ichushi Web ID: 2002261757 [_MOL](#), [MOL-Lib](#)

1. Objectives

To evaluate whether hochuekkito (補中益気湯) can improve immune and nutritional status in immuno-compromised hosts.

2. Design

Randomized controlled trial (RCT).

3. Setting

Critical Care and Emergency Center, Yokohama City University Medical Center, Japan.

4. Participants

Twenty-six immuno-compromised patients who were admitted to the above center. Of these, 13 patients received hochuekkito or placebo for three weeks or longer.

5. Intervention

Arm 1: oral or enteral administration of hochuekkito (補中益気湯) (2.5 g t.i.d.) in 7 patients (all males; mean age 53.3±5.6 years).

Arm 2: administration of the same amount of lactose (placebo) in 6 patients (4 males and 2 females; mean age 53.0±7.7 years).

6. Main outcome measures

Serum albumin level and peripheral lymphocyte count (at baseline, 1, 2, 3, and 4 weeks after the start of the treatment).

Change in prognostic nutrition index (PNI=[albumin level]×10+[peripheral lymphocyte count]×0.005).

7. Main results

There was no significant difference between the two arms in serum albumin level and peripheral lymphocyte count. In placebo-treated patients, PNI increased 1 week after the start of treatment, but decreased in the following week, then increased again. PNI was significantly higher in hochuekkito-treated patients than in placebo-treated patients ($P<0.05$).

8. Conclusions

PNI value is significantly increased by hochuekkito treatment.

9. From Kampo medicine perspective

None.

10. Safety assessment in the article

None.

11. Abstractor's comments

The authors deserve praise for attempting the RCT in an emergency care setting. Since PNI is a surrogate outcome measure, future trials focusing on outcomes that involve the presence or absence of infection and quantity of nutrition, as mentioned in the last part of the present results, are anticipated. Although the number of patients in this study is small, future studies are expected to be larger and confirmatory. In the results of this paper, MRSA infection was identified in 4 of 9 previously non-infected patients in the lactose arm and only 1 of 8 in the hochuekkito arm.

12. Abstractor and date

Tsuruoka K, 15 June 2007, 1 April 2008, 1 May 2009, 1 June 2010, 31 December 2013.