#### **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

Ueda T, Yamashita K, Nakamori Y, et al. Study of the MRSA carriage-preventing effect of Hochuekkito (TJ-41): 1st report\*. *Progress in Medicine* 1999; 19: 1000-3 (in Japanese). MOL, MOL-Lib

## 1. Objectives

To evaluate the effects of hochuekkito (補中益気湯) on prevention of MRSA carriage, prevention of *Pseudomonas aeruginosa* carriage, prevention of infection development, neutrophil count, and C-reactive protein (CRP) value.

## 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

Single facility (Osaka University Hospital ER), Japan.

#### 4. Participants

Twenty patients with trauma (aged 16 years or older) who were hospitalized in the above facility for at least 1 week.

#### 5. Intervention

Arm 1: hochuekkito group (補中益気湯) (n=8 [2/10 enrolled were excluded]; male: female = 3:1; mean age, 46.8 years; injury severity score [ISS], 26.1).

Arm 2: non-treatment group (n=12; male: female = 3:1; mean age, 31.2 years; ISS, 24.0).

#### 6. Main outcome measures

Incidences of MRSA and *Pseudomonas aeruginosa* colonization and infection, CRP level, and neutrophil count.

Bacteriological examination of nasopharyngeal swabs, sputum, midstream urine, feces, and wound scraping was performed on the 1<sup>st</sup>, 3<sup>rd</sup> and, 7<sup>th</sup> day of hospitalization.

## 7. Main results

There was no significant between-arm difference in neutrophil count and CRP level. Meningitis occurred in 0 of 2 treated patients and 4 of 5 untreated patients. There was no difference in the incidence of pneumonia. MRSA was detected in 1 of 8 treated patients and 4 of 12 untreated patients, although the difference was not significant. *Pseudomonas aeruginosa* was detected in 1 of 8 treated patients.

#### 8. Conclusions

Hochuekkito tends to prevent MRSA carriage and infections in trauma patients.

# 9. From Kampo medicine perspective

None.

# 10. Safety assessment in the article

Not mentioned.

## 11. Abstractor's comments

This is a valuable RCT performed in an emergency setting. As admitted by the authors in the text, the timing of hochuekkito administration varied. Specification of the method, duration of hochuekkito administration, and presence or absence of blinding, would increase the reliability of this assessment. More results from their study, now underway with a new protocol, are expected.

## 12. Abstractor and date

Tsuruoka K, 15 June 2007, 1 April 2008, 1 June 2010.