

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

Kuroki H, Kimoto H. An investigation of Western and Kampo integrated medicine for influenza\*. *Kampo to Meneki-Allergy (Kampo and Immunoallergy)* 2005; 18: 47-53 (in Japanese).

**1. Objectives**

To compare the effect the combination of oseltamivir phosphate and Western medications with that of oseltamivir phosphate and maoto (麻黄湯) for pediatric influenza.

**2. Design**

Quasi-randomized controlled trial (quasi-RCT).

**3. Setting**

One center: Hospital pediatric outpatient department, Japan.

**4. Participants**

Ninety-one pediatric patients (1–16 years) who were examined between January and March 2004, showed flu-like symptoms within 48 hours of onset, and rapid diagnostic test positive for influenza.

**5. Intervention**

Treatment assignment in the order of consultation.

Oseltamivir phosphate (4 mg/kg or 150 mg in two divided doses) for 5 days, TSUMURA Maoto (麻黄湯) Extract Granules (0.1–0.2 g/kg in three divided doses) for 3 days. The Western medications were bronchial dilator, anti-histamine, and expectorant.

Arm 1: Oseltamivir phosphate plus Maoto (n=48).

Arm 2: Oseltamivir phosphate plus Western medications (n=43).

**6. Main outcome measures**

Clinical symptom score using the Canadian Acute Respiratory Illness and Flu Scale (CARIFS) to assess loss of appetite, muscle ache, sore throat, insomnia, cough, nasal discharge, vomiting, activity level, and return to school/kindergarten and play; urine condition and urination frequency; fluid intake frequency and volume; body temperature (measured every eight hours: morning, noon, and evening); presence/absence of cramps; and medication as recorded by parent/guardian.

Adverse events were collected by query of visiting outpatients or by phone at weeks 2, 4, and 8.

**7. Main results**

Mean duration of fever (38°C, in hours) was similar between groups:  $27.6 \pm 3.6$  (SE) in arm 1 and  $36.2 \pm 4.3$  in arm 2, showing no significant difference, although duration tended to be shorter in arm 1. There was no significant between-group difference in the CARIFS score over the five-day follow-up period.

**8. Conclusions**

Maoto can be administered safely and has almost the same effectiveness when combined with Western medications. It appears that maoto combined with oseltamivir may be used effectively for pediatric influenza.

**9. From Kampo medicine perspective**

None.

**10. Safety assessment in the article**

No adverse events were observed in the two groups.

**11. Abstractor's comments**

This report is from the proceedings of a symposium. The number of participants is sufficient for analysis, and the effects and safety outcomes appear to suggest that maoto may be used in place of Western medications for relief of symptoms. The authors neglected to mention (in the results) the outcomes that were indicated in the methods; however, hopefully they will formally address this in a further paper. Notably, the Western medications did not include any anti-pyretic analgesics.

**12. Abstractor and date**

Fujisawa M, 31 December 2013.