

## The efficacy of traditional herbal medicines (Kampo) in peri-menopause

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**Background:** In peri-menopause, many women have autonomic imbalance causing hot flush and palpitation, for which many traditional herbal medicines (Kampo) have been prescribed in Japan. However, the efficacy of Kampo, unlike hormone replacement therapy, remains to be evaluated. Purpose: The aim of this study was to evaluate the effects of Kampo on peri-menopausal autonomic imbalance.

**Methods:** Frequency domain measures of heart rate variability (HRV) reflect the autonomic tone (sympathetic and parasympathetic nerve activity) as an average low frequency power (average LF: msec<sup>2</sup>), an average high frequency power (average HF: msec<sup>2</sup>) and an average LF/HF ratio. We measured HRV of five minutes ECG recordings every hour for 24 hours and obtained the averages of those in nine peri-menopausal women (average age: 49.1 yr.; average menopausal age: 48.3 yr.) before and after 3 months therapy of Kampo.

**Results:** With Kampo, symptoms improved in eight of nine (90%). Average HF tended to decrease from 304±195.6 msec<sup>2</sup> to 283.2±182.7 msec<sup>2</sup> (p=0.59). Average LF/HF tended to decrease from 2.14±0.90 to 2.08±1.16 (p=0.33).

**Conclusion:** Kampo therapy was effective for improving symptoms suffered from peri-menopausal autonomic imbalance. Further study needs to evaluate the relation between the autonomic activity and Kampo therapy.