

18. Symptoms and Signs

Reference

Kimura M, Watanabe E, Watanabe S, et al. Psychosomatic effects of aromatherapeutic hand and foot massage on healthy women using two kinds of essential oils*. *Josei Shinshin Igaku (Journal of Japanese Society of Psychosomatic Obstetrics and Gynecology)* 2009; 14(1): 62. Ichushi Web ID 2009228467

1. Objectives

To evaluate the efficacy of aromatherapeutic hand and foot massage (AM) using two kinds of essential oils.

2. Design

Crossover randomized controlled trial (RCT - cross over).

3. Setting

Not described, Japan.

4. Participants

Sixteen healthy women.

5. Intervention

Arm 1: massage with lavender and geranium (LA/GE) oils (n=16).

Arm 2: massage with peppermint and lemongrass (PE/LE) oils (n=16).

Arm 3: massage with carrier oil only (control) (n=16).

6. Main outcome measures

Heart rate variation, electroencephalogram (EEG), salivary cortisol (CS) level, salivary IgA level, scores on psychological questionnaire (Profile of Mood States [POMS]/Mini Mental State [MMS] Examination).

7. Main results

The heart rate variation high frequency (HF) value increased after AM with LA/GE, while the LF/HF values increased after AM with PE/LE. The EEG power percentage increased the most after AM with PE/LE. CS concentration decreased greatly after AM with LA/GE and after AM with PE/LE. Salivary IgA increased the most after AM with PE/LE. Although the scores for negative emotions in the psychological questionnaire increased after AM with LA/GE, scores for positive emotions increased after AM with PE/LE. Fatigue decreased the most after AM with PE/LE, while relaxation increased.

8. Conclusions

A short period of aromatherapeutic hand and foot massage not only has psychological effects, it changes physiological indicators and, depending on the type of essential oil used, achieves various psychosomatic effects.

9. Safety assessment in the article

Not mentioned.

10. Abstractor's comments

Previous research has indicated that massage using essential oils has certain psychological and physiological effects: the significance of this study is that it used RCT methods and various stress markers to investigate the distinctive effects of particular oils. However, the design of this study employs the cross over method, and considering salivary indicator stimulus-response time,¹ it would appear that setting the interval between AM applications to 10 minutes was too short for an assessment of the differences between the effects of LA/GE and PE/LE. In addition to the lack of safety evaluation of the oils, neither the number of subjects in the control group nor the trial procedure was specified. The psychological and physiological effects of the AM massage itself, not just the essential oils, are considerable. Further evaluation using a design that takes those points into account would increase its scientific value.

¹ Kirschbaum C, Hellhammer DH. Salivary cortisol in psychobiological research: an overview. *Neuropsychobiology* 1989; 22: 150–69.

11. Abstractor and date

Fujii R, 21 December 2010, 28 February 2011.