

Original Paper

## Effect of foot special massage on vital sign of patients after hysterectomy: a clinical trial study

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### Abstract

**Background and Objective:** Hysterectomy is stressful in women operation, due to increased release the level of catecholamines some physiological reactions including increase in breathing, heart rate and blood pressure are clinically observed. Massage therapy helps to improve the nervous and cardiovascular system and modifies physiological responses. This study was done to determine the effect of foot massage on the vital signs of patients after hysterectomy.

**Methods:** In this clinical trial study 60 women underway hysterectomy were randomly divided into intervention (n=28) and control (n=29) groups. Subjects in intervention group were received a 20 minute foot massage according to the mentioned method in two sessions first and second day after surgery, with 24-hours interval. Before and 30 minutes after intervention, vital sign including systolic and diastolic blood pressure, pulse, breathing were recorded for each subject.

**Results:** In the intervention group, all of the signs of vital signs before and after massage in the first and second days after the operation showed a significant decrease ( $P<0.05$ ). The number of pulses and diastolic blood pressure in the first and second day after surgery and systolic blood pressure on the second day in the control group showed a significant reduction ( $P<0.05$ ). At the end of the first day after the intervention group, the systolic blood pressure and respiratory rate showed a significant decrease compared to the control group ( $P<0.05$ ).

**Conclusion:** Foot massage improves systolic blood pressure and breathing at the first day after hysterectomy, which may indicate an increase in parasympathetic activity.

**Keywords:** Hysterectomy, Foot special massage, Blood pressure, Pulse, Breathing

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