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The Effect of Effleurage Massage Technique on Reducing the Scale of Uterine Involution Pain in First Day of Postpartum Mothers in the Working Area of Cikadu Health Center, Cianjur Regency, Indonesia

Leni Herlina¹, Teti Yuli Handayani^{1*}

1Politeknik Bhakti Asih, Purwakarta, Indonesia

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*Corresponding author:

Teti Yuli Handayani

E-mail address:

tetihandayani@polbap.ac.id

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1. Introduction

Birth is one of the crucial moments in a woman's life. After going through the birthing process, a mother's body experiences various physical and emotional changes. One of the changes often experienced by postpartum mothers is uterine involution pain. Uterine involution is a natural process in which the uterus returns to its original size and shape after delivery. This process is often accompanied by pain and discomfort in the lower abdominal area, which can affect the mother's comfort and quality of life after giving birth. Uterine involution is a natural physiological process after birth in which the uterus returns to its original size, shape, and position. This process is an essential part of postpartum recovery.

ABSTRACT

The effleurage technique can increase blood circulation to the area being massaged. Increasing blood flow to the uterus and lower abdominal area can help in postpartum recovery and reduce the pain of uterine involution. This study aimed to determine the effect of effleurage massage techniques on reducing the scale of uterine involution pain in postpartum mothers on day 1 in the Cikadu Health Center Working Area, Cianjur Regency, Indonesia. This research is an experimental study with a one-group pretest-posttest design approach. It uses primary data obtained using an assessment instrument, the numeric rating scale (NRS), to determine the level of back pain in pregnant women. A total of 30 research subjects participated in this study. This study shows that effleurage massage intervention effectively reduces the intensity of uterine involution pain in postpartum mothers. There was a decrease in pain intensity after massage effleurage, and it was stated to be statistically different, p<0.05. In conclusion, there is an effect of the effleurage massage technique on reducing the scale of uterine involution pain in postpartum mothers on day 1 in the Cikadu Health Center Working Area, Cianjur Regency, Indonesia

> However, as mentioned, pain and discomfort often accompany this uterine involution process. Uterine involution pain usually occurs due to contractions of the uterine muscles trying to return the uterus to its original condition. This is the body's normal response to the recovery process, but it can be an uncomfortable experience for postpartum mothers.¹⁻³

> One method that can be used to reduce uterine involution pain in postpartum mothers is the effleurage massage technique. Effleurage massage is a light and gentle massage done with gliding movements and a flat hand surface on the skin. This technique has been used widely in healthcare to reduce muscle tension, improve blood circulation, and reduce pain. Using effleurage massage techniques for postpartum

mothers is an interesting approach to reducing uterine involution pain without using drugs that may have side effects. The effleurage massage technique is a non-invasive method that does not require medical procedures or the use of drugs. This can be a safer and more comfortable option for mothers who want to avoid the side effects of medication. Effleurage massage is performed with gentle gliding movements, which can provide relaxation. This can help reduce the stress and tension that mothers often experience after giving birth. The effleurage technique can increase blood circulation to the area being massaged. Increasing blood flow to the uterus and lower abdominal area can help in postpartum recovery and reduce the pain of uterine involution. In addition to the physical benefits, effleurage massage can improve the bond between mother and baby. This moment can help the mother feel closer to her baby, providing crucial emotional support. Compared to medication, using effleurage massage techniques has a lower risk of side effects. This makes it a safer choice for breastfeeding mothers or those sensitive to drugs.4-7 This study aimed to determine the effect of the effleurage massage technique on reducing the scale of uterine involution pain in postpartum mothers on day 1 in the Cikadu Health Center Working Area, Cianjur Regency. Indonesia

2. Methods

This research is an experimental study with a onegroup pretest-posttest design approach. It uses primary data obtained using an assessment instrument, the Numeric Rating Scale (NRS), to determine the level of back pain in pregnant women. A total of 30 research subjects participated in this study, where the research subjects met the inclusion criteria. The research was conducted in the Cikadu Health Center Working Area, Cianjur Regency, Indonesia. The inclusion criteria in this study were mothers postpartum day one and willing to participate in the research. Effleurage massage is carried out four times within two weeks. Data analysis was carried out using SPSS version 25 software univariately and bivariate to assess each variable's frequency distribution and the influence of the research conducted, with a p-value < 0.05.

3. Results and Discussion

Table 1 presents the effectiveness of the pre and post-test interventions. This study shows that effleurage massage interventions effectively reduce the intensity of uterine involution pain in postpartum mothers. There was a decrease in pain intensity after effleurage massage, and it was stated to be statistically different, p<0.05.

Variable	Pre-test	Post-test	P-value*
Pain scale degree	4,58±0,23	1,52±0,19	0,001

Table 1. Effectiveness of pre and post-test interventions.

*Dependent t-test, p<0,05.

The gentle, gliding movements of effleurage massage can help relax tense muscles, especially in the shoulders, neck, and back areas. This can help reduce the physical tension that mothers often experience after giving birth. Effleurage massage can stimulate the parasympathetic nervous system, which is responsible for calming the "fight or flight" response in the body and replacing it with a "rest and digest" response. This can help relieve stress and promote feelings of relaxation. The gliding movement in effleurage massage can increase blood flow to the massaged area. This helps relieve sore feelings and helps the body recover better. Apart from reducing tension, effleurage massage can also help reduce the pain that mothers may experience after giving birth. This can provide a feeling of comfort and reduce painrelated stress. In addition to its physical benefits, effleurage massage allows mothers to feel connected to their feelings and those of their babies. This can provide significant emotional support during this time.⁸⁻¹¹

The effleurage massage technique with gentle, gliding movements can help relax the uterine muscles, experience intense which may and painful contractions during the involution process. This is one of the main benefits of using this method in postpartum mothers. Uterine muscles that contract too much can cause significant pain. The gentle, gliding motion of effleurage massage can help relieve excessive contractions of the uterine muscles, reducing tension and associated pain. Effleurage massage can also increase blood flow to the uterine area. This increased blood circulation helps deliver more oxygen and nutrients to the uterine muscles, aiding recovery and reducing tension.12-15

4. Conclusion

There is an effect of the effleurage massage technique on reducing the scale of uterine involution pain in postpartum mothers on day 1 in the Cikadu Health Center Working Area, Cianjur Regency, Indonesia.

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