

# Analysis of Post Episiotomy Nursing Care with Cold Compress Intervention

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**Abstract:** Postpartum is the time to start after placenta birth until return of reproductive organs to in normal condition or before pregnancy taking place for 6-8 weeks. Service postpartum given to Mother during period from 6 hours to 42 days, because often give rise to rips in the road birth (episiotomy) which can give rise to happen bleeding and infection in the mother postpartum. The objective was to get an idea of the application of therapy compress cold as intervention in patients postpartum spontaneous with problem inconvenience post-partum. A descriptive case study using anamnesis, observation, physical examination, and medical records. The results showed that the case study of post-partum patients spontaneous with discomfort nursing problems post-partum consequence wound episiotomy obtained subjective data and objective data, author get problem nursing main inconvenience post-partum intercourse with perineal trauma during labor and birth, proven with exists wound episiotomy degree II. Discomfort caused by injuries episiotomy can overcome with use therapy compress cold, this be marked with exists decline scale painful from 5 to 2 after done intervention in 3 days. Therapy compress cold own significant influence of postpartum discomfort in post-partum patients spontaneous Birth.

**Keywords:** Episiotomy, discomfort post-partum, compress cold

Received: 23 November 2023

Revised: 13 February 2024

Accepted: 10 Mei 2024

Published: 11 Mei 2024

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## Introduction

Postpartum is a six to eight-week phase that begins after the placenta is born and ends before the reproductive organs revert to their normal state, whichever comes first. Intentional or inadvertent birth canal injuries are frequently inflicted upon spontaneous postpartum moms (episiotomy). Because the mother is vulnerable to bleeding and infection due to these wounds, it's critical to keep an eye on her, particularly in the first 24 hours following birth, to avoid the rate of maternal death from rising (Auguste & Gulati, 2018; Boushra & Rahman, 2023).

In 2020, pregnancy- and childbirth-related avoidable causes claimed the lives of about 800 women every day. In 2020, there was a maternal death roughly

every two minutes. Maternal mortality ratios, or the number of maternal deaths per 100,000 live births, decreased by almost 34% globally between 2000 and 2020. 2020 saw about 95% of maternal deaths take place in lower-middle-income and low-income nations. Women's and newborns' lives can be saved by receiving care from qualified medical experts prior to, during, and after childbirth (WHO, 2024).

A medical treatment known as an episiotomy is carried out during labor to facilitate the delivery process by making an incision to the perineum, or birth canal muscle, which is situated between the anus and the vaginal opening. An episiotomy is a procedure frequently performed in cases of fetal emergency, improper baby position, or short, stiff perineum to

## How to Cite:

Nurafita, H., Yekti Widadi, S., Puspita, T., & Wahyudin. (2024). Analysis of Post Episiotomy Nursing Care with Cold Compress Intervention. *Nursing Case Insight Journal*, 2(1), 29-32. <https://nci.journalhealth.org/index.php/nci/article/view/11>

expand the vaginal opening and aid childbirth (Choudhari et al., 2022; Barjon & Mahdy, 2023).

Episiotomy wounds can cause discomfort to the mother. Discomfort can be caused by physical disorders, namely labor pain (episiotomy), uterine involution so that the uterus will continue to contract to return to its original shape. Apart from that, discomfort can also be caused by psychological conditions, the mother will feel tired after the birth process and lack of attention and support from her partner and family (Sutiyono, 2023).

Efforts that can be made by nurses as providers of nursing care to overcome discomfort after childbirth due to episiotomy pain are pharmacological and non-pharmacological measures. Non-pharmacological measures consist of actions that include distraction techniques, breathing exercises, warm or cold compresses and encouraging mothers to increase sleep rest (Barjon & Mahdy, 2023; Newton-Wellesley Hospital, 2024).

Applying a cold compress can provide the advantage of reducing blood flow to the wound area, this can reduce the risk of bleeding and edema. Based on several studies, cold compresses are known to be more effective in reducing episiotomy pain because they can provide an analgesic effect in the form of slowing the speed of nerve conduction so that fewer pain impulses reach the brain. Applying cold compresses is also known to be useful for reducing the number of prostaglandins that cause pain receptor performance, inhibiting the inflammatory process, and stimulating the release of endorphin hormones (Kırca et al., 2021; Apriyandi et al., 2023; Triska et al., 2023; Suvarna & Chippala, 2024).

## Method

The method used in this research is a descriptive case study by analyzing the development of post-episiotomy patients on Day 1 with post-partum discomfort disorders. Participants were randomly selected according to the criteria of inpatients after episiotomy day 1 who experienced postpartum comfort problems and patients who were given oral analgesic drug therapy. The signs and symptoms felt by the patient during the assessment were that the patient said there was pain in the episiotomy suture wound, the pain increased when walking with a pain scale of 5 (0-10), there were post episiotomy stitches, the client appeared to be grimacing, blood pressure 145/87 mmHg, pulse frequency 105x/minute and respiration 24x/minute. The instrument used by the author in this research was the standard operating procedure (SOP) for cold compresses. Data was collected using the interview method and measured using the Numerical Rating Scale (NRS) to measure pain before and after the intervention which was then recorded in nursing care.

The cold compress intervention was carried out in accordance with the steps in the planning guidelines of the Indonesian National Nurses Association (PPNI). The books used are SDKI, SLKI and SIKI to determine nursing diagnoses, nursing aims and objectives, nursing plans and to evaluate actions given to patients (Tim Pokja SDKI DPP PPNI, 2017; Tim Pokja SIKI DPP PPNI, 2018; Tim Pokja SLKI DPP PPNI, 2022). The intervention carried out is pain management by identifying the quality and intensity of pain, identifying the pain scale, applying a cold compress 2 hours before administering analgesics, to reduce pain and prevent bleeding in patients. The intervention is carried out in accordance with the Indonesian Nursing Intervention Standards (SIKI) and SOPs based on Evidence Based Practice (EBP). The intervention was implemented under the supervision of the nurse who was responsible for the patient.

The intervention was carried out on December 14, 2022, at 16.00 WIB in the Jade Room at RSUD dr. Slamet Garut to a 36-year-old participant was treated in that ward. The patient agrees that his health data is published without any identity (anonymous).

## Result and Discussion

The cold compress intervention was carried out in accordance with evidence-based practice for participants. After 3 days of cold compress intervention for 15-20 minutes, the pain scale decreased from 5 to 2 using a pain scale assessment of 0-10. This shows that the average decrease in the pain scale was 1 every day.

Table I. Changes in participants' pain scale.

Date	Pain Before intervention	Pain After interventio n
December 14, 2022	5	4
December 15, 2022	4	3
December 16, 2022	3	2

The author provided nursing care to participants for 3 days. In providing nursing care the author determines the formulation of the main problem and main interventions in accordance with evidence-based practice (EBP). The main problem that emerged among managed participants was post-partum discomfort with the main intervention being pain management. One of the main interventions carried out by the author was the administration of cold compresses to help reduce episiotomy pain in patients and improve their comfort status. Cold compress intervention was carried out for 3 days every morning and evening for 15-20 minutes, 2

hours before giving analgesics, using ice cubes at a temperature of 15°C wrapped in a clean cloth. The data in table 1 shows a change in the episiotomy wound pain scale from a scale of 5 to 2.

These results are in line with the results of research conducted by Apriyandi et al., (2023), after receiving a cold compress, the pain scale of all respondents experienced a decrease from moderate to mild pain (5 to 2). This study supports the findings of Suvarna & Chippala (2024) study, which demonstrated that there was a substantial difference in the groups' intervention-related pain as measured by the NPRS ( $p < 0.001$ ). It was discovered that using an ice pack once a day for two days was both safe and practical for post-episiotomy patients. Another research by Kirca et al., (2021), explained that, cold application methods can be effective to reduce pain as a non-pharmacological nursing intervention.

Based on the main problem of post-partum discomfort that arises in post-episiotomy patients, the main implementation given is cold compresses. This is done to help reduce pain due to episiotomy and reduce complaints of discomfort in patients. The mechanism for reducing pain by applying cold compresses is associated with the release of endorphins. Endorphin production can be increased through skin stimulation. The higher a person's endorphin levels, the lighter the pain felt, because the endorphins released will block the transmission of painful stimuli, so that pain will not be perceived (Isnaini et al., 2022; Apriyandi et al., 2023). Therefore, cold compress intervention is important, apart from reducing pain and discomfort, cold compresses can also prevent the risk of bleeding, because the cold effect can affect blood vessels by vasoconstriction.

## Conclusion

Cold compresses can overcome the main problem of post-partum discomfort with the cold effect that can stimulate endorphins so that the perceived pain will be reduced or even absent.

## Acknowledgments

I want to express my gratitude to an participant for willingly participating in the intervention and answering questions.

## Funding

No party provided funding for the research.

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