



Effect of hot application on level of episiotomy pain: A quasi experimental study

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ABSTRACT

A quasi experimental study was conducted to determine the efficacy of hot application on sixty postnatal mothers with mediolateral episiotomy of normal vaginal delivery that were selected by purposive sampling from postnatal ward of Government Taluk Hospital, Nedumangadu. The tools used for data collection were interview schedule to collect socio demographic Performa, clinical data sheet, and numeric rating scale for assessing the episiotomy pain. Thirty subjects in the experimental group received hot application for twenty minutes once a day after 24 hours of delivery with warm water 380C – 410C. Posttest was conducted twenty minutes after the intervention while breast feeding for both group. The result of the study shows the severity of episiotomy pain in the experimental group was lower than the control group at ($p < 0.01$). The study concluded that hot application has significant effect on episiotomy pain and can use this non-invasive technique to decrease the episiotomy pain.

KEYWORDS : hot application; episiotomy; pain; postnatal mothers.

Introduction:

The birth of a baby is a momentous occasion: tiny details of the experiences surrounding the whole events are etched in the memory forever¹. Labour is a wondrous act of nature, and unique to every childbearing women. It is a transformative event in a women's life. The onset of motherhood presents a unique set of physical, emotional and psychological challenges. The post-partum phase can become even more challenging when the new mother experiences perineal or genital tract trauma as a result of child birth².

Motherhood is a beautiful process, where by mothers safely delivers a child. It is the magic of creation. Care must be given to ensure safe birth. The safe motherhood aims at enhancing the quality of life and women through adoption of a combination of health and non-health strategies³. Pregnancy and child birth are special events in women's life. The mother suffers much distress after child birth due to painful perineum. Perineal pain is most commonly associated with child birth by vaginal delivery. Pain following episiotomy appears to be universal. The mother undergoing episiotomy is characterized by greater blood loss in conjunction with delivery, and there is a risk of improper wound healing and increased pain during early Puerperium⁴.

Episiotomy is a common surgical procedure performed during the second stage of labour. The first performance of episiotomy was done in 1742, when perineal incisions were used to facilitate deliveries. Episiotomy can decrease the amount of pushing by the mother during delivery. It can also decrease the trauma to the vaginal tissues and expedite delivery. The incision is repaired by suturing the wound together. Episiotomy can be associated with extensions or tears into the muscle of the rectum itself. Other complications include bleeding, infection, swelling and local pain. The typical healing time for an episiotomy is around four to six weeks depending on the size of the incision and the type of suture material used to close the wound. Episiotomy and tearing may leads to pain, swelling and inflammation which can be relieved by the use of warm water cleansing⁵.

Postnatal women are prone for puerperal infection, which can be prevented by proper hygienic measures, especially sitz bath. Any trauma such as episiotomy, tear, and laceration will increase the tendency for the development of infection in the postnatal period. Proper care of episiotomy incision should be encouraged to ensure that the trauma is healing satisfactorily. Pain and discomfort from episiotomies can be reduced by providing therapeutic measures such as, warm water sitz bath to promote blood flow to the episiotomy for rapid healing⁶.

Episiotomy pain often interferes with basic daily activities for the woman such as walking, sitting, and passing urine and also negative-

ly impacts on motherhood experiences. The non- pharmacological pain management includes hot, cold application, massage therapy, physical therapy, transcutaneous electrical nerve stimulation, spinal cord stimulation, aromatherapy, guided imagery, laughter, music, bio-feedback, self -hypnosis, acupuncture, and acupressure⁷. Among all the non-pharmacological methods, sitz bath is one of the best methods because it is safe, economical, free from side effects, giving long lasting cure, and it is compatible with other forms of treatment¹⁰. Episiotomy suture can cause considerable discomfort, pain, because the perineum is an extremely tender area and the muscles of the perineum are involved in many activities. However, they usually do not anticipate the pulling pain from perineal stitches in the postnatal period, discomfort that interferes with their rest and sleep, mother feels discomfort even when they sits and hold her baby. A warm sitz bath helps to decrease inflammation and relieve tension in the area¹¹. A warm bath or sitting in a tub of warm water for twenty minutes several times a day can help to relieve episiotomy pain. After the bath, the incision site should be patted dry with a soft towel¹⁴.

Martha Barry, R.N and certified nurse midwife at the Illinois Masonic Hospital conducted a comparison study on effect of warm and cold water on reduction of episiotomy pain reported that people who used warm water had less pain than that of people who used cold water¹⁵.

Sitz bath is a simple and cost effective and easy method of treating episiotomy wound in the hospital as well as in home settings. As its takes less time, sitz bath is not a routine practice in our OBG ward settings in spite of it being cost effective and less time consuming. During this procedure care giver can talk and communicate with the mothers which may reduce the fear and may relieve the pain and increases comfort, during the postnatal days. The postnatal mother can do this independently in the home settings when they get discharged from the hospitals following the delivery.

Materials & Methods:

The investigator adopted quantitative approach using a quasi-experimental design (pretest posttest control group design). The setting chosen for the present study was the Post natal ward of Government Taluk Hospital, Nedumangadu. Using purposive sampling technique sixty subjects who underwent normal vaginal delivery with mediolateral episiotomy were selected as per the (thirty in each both control and experimental group). The tools used for the study were a Socio Demographic Proforma which collects the data of subjects, a clinical Data Sheet and a Standardized scale of zero to ten pain scale. Permission was sought from Principal of Sree Gokulam Nursing College and Medical superintendent of Government Taluk Hospital, Nedumangadu. Formal administrative permission was obtained from Manag-

ing Director and HOD, Department of Obstetrics and Gynaecological of Sree Gokulam Medical College Hospital and Research Foundation. Data was collected over a period of one month for the main study from 18. 12. 2013 to 18. 01. 2014. The investigator introduced and explained regarding the study and assured that, the information provided by the study participants will be kept confidential. Informed consent was obtained from each study participants to ensure their willingness to participate in the study. Pretest data was collected in both control and experimental group during breast feeding. Hot application was given to all subjects in the experimental group. Subjects are advice to go to toilet, pass urine, wash perineal area and remove the pad and instructed not to wear panty. Then subject's perineal area / hips and buttocks are submerged in a large steel basin containing four litres of warm water having a temperature of 38o – 41o C for twenty minutes once a day, after 24 hours of delivery. After twenty minutes posttest was done by using numerical rating scale for both control and experimental group during breast feeding.

Results:

Socio demographic data of subjects

Majority of subjects in both groups belonged to the age group 28-32 years, followers of Hindu religion and with higher secondary education. Majority of subjects having one parity and haven't yet attended any child birth preparation classes. Chi square value was computed to confirm the homogeneity of both groups.

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Table: 1 Mean, standard deviation and t value of pre-test and post test scores of both groups

(n=60)

Group		Mean	SD	t value
Control	Pre test	5.9	1.7	3.266**
	Post test	6.3	1.8	
Experimental	Pre test	5.2	1.8	16.134***
	Post test	2.3	1.6	

Table 1 depicts mean, standard deviation and t value of both groups, In the experimental group the pre-test mean pain score was 5.2 and post-test mean score was 2.3, using paired t test it is found that the scores were highly significant ($t=16.134^{***}$, $p<0.001$).

Association between episiotomy pain and selected socio demographic variables

Chi square test was used to compute the association between pre-test episiotomy pain scores and selected socio demographic variables such as age, religion, educational status, and parity and child birth preparation classes of the subjects. From the analysis it was evident that there was no statistically significant association between pain level and above said socio demographic variables.

Discussion:

The current study indented to assess the effect of hot application in reducing the episiotomy pain level among mothers. The findings regarding the episiotomy pain shows that the pain score was lower in the experimental group comparing to the control group and the scores were statistically significant at $p<0.001$ level. The results were consistent with findings of a study conducted by Vijayalakshmi 2010, on a comparative analysis of warm sitz bath versus infra-red radiation on level of episiotomy pain. Thirty samples were selected randomly and given both therapies simultaneously to each group. The overall percentage difference between both groups was 9.93%. The findings of the study revealed that warm sitz bath was significantly effective than infrared radiation therapy.

According to the results of the present study and above mentioned studies it can be concluded that hot application is a cheap, simple and effective method in reducing episiotomy pain. Hot application can cause reduction in pain, increase in peace of mind and overall satisfaction of mothers.

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