

Investigating the effect of Sesame Ointment on Wound healing of Episiotomy

Research Article

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Abstract

Episiotomy is one of the most common midwifery interventions method for preventing injuries to the pelvic floor during the delivery process. Traditional medicine has a special place in improving the quality of postpartum care. Sesame is one of the herbs with anti-inflammatory, anti-bacterial and antioxidant activity. This study was evaluate the effect of sesame ointment on episiotomy healing. Methods: This randomized control clinical trial was performed on 104 eligible women. The samples were block randomly assigned to one of the groups Intervention and control. Samples were used sesame and placebo ointment for epizootics from 4 hours after delivery for ten days every 8 hours. Clinical evaluation of episiotomy ulcer was performed 4 hours, 7 and 10 days after delivery with using REEDA tool. SPSS software version 16 was used for data analysis. P value less than 0.05 was considered significant. Results: The average of wound healing rate was 7 days after episiotomy in the intervention group 0.09 ± 0.29 and in the control group was 0.73 ± 0.44 . Independent t-test showed that the two groups had a significant difference ($p < 0.001$). Healing of the wound 10 days after episiotomy showed that the mean scores in the control group (0.4 ± 0.49) and in the intervention group (0.02 ± 0.13), healing in the intervention group significantly decreased from the control group ($p < 0.001$). Conclusion: Sesame ointment can be used as a pain relief and accelerator for episiotomy healing.

Keywords: Episiotomy, Sesame ointment, wound healing, Pain intensity.

Introduction

Consumption of sesame seed oil and its topically or orally improves the wound (18-20). The World Food and Drug Administration has not approved the use of herbal medicines for sesame and its use has not been mentioned. A study to investigate the effects of various ozone-containing vegetable oils on healing of wounds has shown that sunflower oil is more effective in treating wounds (21). External use of sesame oil has been effective in reducing the severity of pain caused by bodily injuries and also reducing the use of nonsteroidal anti-inflammatory drugs and has been considered as a therapeutic approach to reducing the pain intensity of affected patients (22). Sesame oil have been effective in preventing sterilization and itching caused by primipara women (23).

No study has been done on the effect of sesame on episiotomy wound healing. The researcher, as a midwife who is responsible for producing knowledge and performing applied research in the field of recognition and development of traditional Iranian

medicine in promoting maternal health, decided to conduct a study to investigate the effect of sesame ointment on episiotomy ulcer healing. Positive results and confirmation of its effectiveness can be used to recommend the use of sesame ointment for improving episiotomy wound healing and promoting women's health for healthcare professionals, midwives, and gynecologists.

Method

The present study was a randomized, Triple Blind Clinical Trial with an intervention group and a placebo group. The type of intervention was considered as an independent variable and episiotomy ulcer healing as a dependent variable.

Results

Individuals in two groups did not have a significant difference in terms of personal characteristics such as age, level of education, economic status, occupation, episiotomy length, duration of first, second and third stages of labor, number of sutures, head circumference, BMI. Two groups Consideration of postpartum factors such as the highest status of the mother during lactation and the time of onset of daily activity after delivery and the use of sedative drugs were significant (Table -1)

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Table 1. Comparison of some of the delivery data of the research samples in two groups of drugs and placebo

Groups	Sesame ointment group	Placebo ointment group	The significance level
Variable	Standard deviation ± mean	Standard deviation ± mean	
Start activity	1.56±0.57	2.13±0.39	P<*0.001
Mothers Breastfeeding position	71.7%	67.3%	P=0.0015**
Sedative use	77.4%	75%	P<**0.001

Table 2 – Scale of healing scores in two groups and its significant test

Wound healing	Before intervention	After 7 days	After 10 days
Sesame ointment group	1.86±0.48	0.09±0.29	0.02±0.13
Placebo ointment group	1.86±0.39	0.73±0.44	0.4±0.49
Test results	t= 0.029 df=103 p=0.977	t= 8.614 df=103 P<0.001	t=5.448 df=103 P<0.001

However, there was no significant difference between the 7th and the 10th day after the intervention. In the control group, the results showed that the wound healing before the intervention was 7 days and 10 days after episiotomy was significant. 7 days later and 10 days later Significant statistical differences were observed in episiotomy in the wound healing score. Ismaili et al. (2012) A double-blind clinical trial with the aim of determining the effect of turmeric solution on episiotomy ulcer healing in two groups of intervention (turmeric solution) and control (iodine) for ten days. Wound healing was assessed for 24 to 48 hours as well as 10 days after delivery. The findings indicated that the mean and standard deviation of Reida score in the turmeric consumer group 24 hours after episiotomy was significantly lower than that of the control group (27).

Turmeric raw extract like sesame, chamomile and evergreen flowers have several properties, including anti-inflammatory, anti-bacterial, antiviral properties and have wound healing function. Azari et al. (2014) conducted a tri-blinding clinical trial entitled "The study of the effect of chamomile cream on the improvement of episiotomy ulcer in primiparous women." Evaluation was performed on the first, seventh, tenth and fourteenth days after delivery. The results showed that in the first day of birth, the two groups did not differ in terms of RIDA score, but the two groups had significant differences in terms of wound healing in the seventh, tenth and fourteenth days. (28). The results of this study were compared with the results of this study in a manner consistent with the results of study by Jahdi et al. (2012), which investigated the effect of Calendula officinalis ointment on episiotomy healing in nulliparous women. Use of Calendula officinalis ointment increases episiotomy wound healing rate significantly and has healing properties, anti-inflammatory and antimicrobial properties (29). Mohammad Ali Ee et al. (1393) In a study, we investigated the effect of gelatin ointment on episiotomy ulcer healing in primiparous women on 84 primiparous women referred to Baharlo hospital in Tehran. The results showed that the mean and standard deviation of

Rida score on the 5th day after delivery in the intervention group was significantly lower than the placebo group, which is consistent with the results of the present study (30).

Among the limitations of this study were the impossibility of complete control of nutrition, the level of individual health and the physical activity of mothers after delivery, all necessary post-partum training was provided. In addition, the difference in labor factor from the onset of the sampling to the end of the study was the other limitations of the study, which the research team controlled partly by monitoring the mode of delivery and randomization.

Conclusion

Sesame oil has anti-inflammatory and microbial properties and can be used to accelerate episiotomy wound healing. Given the increasing tendency of people to use herbal medicines in recent years, Sesame ointment can be used. As a factor increasing the speed of healing and episiotomy recommends postpartum primiparous women.

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