Original Article

Perineal Pain Severity in Postpartum Period Evaluated Six Hours and Three Months after Delivery

Derya Kaya Senol, PhD, RN
Department of Nursing, Faculty of Health Sciences, Cankiri Karatekin University, Cankiri, Turkey

Ergul Aslan, PhD, RN
Assoc. Prof, Istanbul University Florence Nightingale Faculty of Nursing, Department of Women Health and Diseases Nursing, Sisli, Istanbul, Turkey

Correspondence: Ergul Aslan, Assoc. Prof, Istanbul University Florence Nightingale Faculty of Nursing, Department of Women Health and Diseases Nursing, Sisli, Istanbul, Turkey e-mail:ergul34tr@hotmail.com

Abstract

Background: Postpartum perineal pain affects most of the women in the first 10 days after delivery and a lower rate of the women in 18 months after delivery**.**
Objective: The purpose of this study was to evaluate perineal pain in the postpartum 6-hour and 3-month periods.
Method: This is a cross-sectional, prospective and descriptive study. Eighty postpartum women admitted to an obstetrics and gynecology hospital. 52 were primipara and 34 were multipara. Perineal pain severity was evaluated at face to face interviews in the postpartum 2-hour and 6th-hour periods and on phone calls 3 months after birth. A personal characteristics form consisting of 45 questions and Visual Analog Scale (VAS) were used for data collection.
Results: The VAS score for perineal pain was 6.35±1.97 in the postpartum 2nd hour, 5.70±1.88 in the postpartum 6th hour and 4.10±1.99 in the postpartum 3rd month. The perineal pain score was higher in the primipara and the 6th-hour perineal pain score in the primipara was significantly different from that of the multipara. While the perineal pain score in the first 2-hour period after giving birth was higher in the women with intact perineum, the pain score in the 6th hour and 3rd month was higher in the women who had episiotomy or/and spontaneous tears. The primipara women experienced significantly more severe pain during sexual intercourse in the postpartum 3rd month (p=.001).
Conclusion: Women who have their first birthing and who have episiotomy experience more perineal pain in the postpartum period. Impact statement: Perineal pain disturbed women until the third month after birth specially primiparas and need to be followed.

Keywords: Parturition; perineum; pain; dyspareunia; episiotomy

Introduction

Vaginal delivery is advantageous in that it provides a faster postpartum healing process and earlier initiation of mother-baby bonding (Altuntug, Kızılırmak, Kartal & Baser, 2010). However, perineal trauma occurring during delivery has physical, psychological and social effects in the early and late postpartum periods (Albers, Sedler, Bedrick, Teaf & Peralta, 2006). Perineal pain in hours after delivery causes pain and discomfort while sitting, walking, urinating and defecating, restricted motility, prevention of infant care, failure to provide lactation and sleeplessness in the short-term and depression, maternal anxiety, stress urinary incontinence, dyspareunia, communication problems, anger and tiredness in the long-term (Steen,2010).

Postpartum perineal pain affects most of the women in the first 10 days after delivery and a lower rate of the women in 18 months after delivery and leads to dyspareunia in three months after delivery (Andrews, Thakar, Sultan & Jones,

2008). Whether episiotomy is performed or not, perineal pain is a serious problem even 8 weeks after delivery and persists for 24 months (Declercq, Cunningham, Johnson & Sakala, 2008). It has a negative impact on daily life activities and the quality of life and decreases postpartum comfort in primipara (Way, 2012).

This study was performed to evaluate perineal pain in the first six hours and in the third month after delivery.

Methods

Study population

This is a cross-sectional, prospective and descriptive study. The study was carried out in a postpartum ward of an obstetrics and gynecology hospital. The hospital has 306 beds. It was selected as the study setting since it offers care for people with middle and low socio-economic status and has a high rate of births. Out of 8035 births in the hospital in 2013, 63% (5.02) were vaginal delivery, 1% (112) was assisted vaginal delivery (e.g. vacuum) and 36% (2.90) were caesarean section.

The sample included 105 postpartum women admitted to the postpartum ward one day a week between 2012 and 2013. Of 105 women, 52 were primipara and 50 multipara. However, a total of 86 women, of whom 52 were primipara and 34 were multipara, were contacted by phone in the third month after delivery. Women who accepted to participate in the research answered the phone were included in the sample. Nineteen women who could not be contacted were excluded from the study. The sample size was calculated with G*Power 3.1. Perineal pain severity was evaluated. In a study by Sheikhan et al., perineal pain severity score was found to be 3.20 ± 1.58 (Sheikhan et al., 2011). Statistical analysis made in accordance with the results of their study showed that Cronbach alpha coefficient was 0.05 and that the study power was 90. Based on the mean perineal pain score calculated, a total of 85 patients were needed to be included in the study.

Data Collection

Data were gathered with a personal characteristics form developed by the researcher in light of the literature and Visual Analogue Scale, directed towards determining perineal pain severity. The personal characteristics form consisted of 45 questions about socio-demographic characteristics, general health status and reproductive features. Visual Analogue Scale is a horizontal or vertical scale ranging from zero to ten. Zero refers to lack of pain and 10 refers to the most severe pain one can bear (Huskisson, 1974).

Data collection tools were completed at face to face interviews in first evaluation. Perineal pain was evaluated two times in the postpartum period; i.e. in the first two hours and in the first 6 hours after delivery. The women were asked to show pain severity during daily activities like lying, sitting, walking, breastfeeding and urinating on Visual Analogue Scale. Since effects of local anesthesia for episiotomy can persist for two hours, perineal pain was re-evaluated in the sixth hour after the first evaluation. In addition, the women were observed to perform some physical activities in the sixth hour such as standing up, walking, breastfeeding, sitting and urinating. In the postpartum third month, the women were contacted and asked questions about perineal pain severity and effects of this pain on their physical activities. The second interview with the women was made by phone 3 months after birth.

Ethical considerations

Ethical approval was obtained from the Ethical Committee for Clinical Research of the University (approval number: B.30.2.IST.0.30.90.00/26843). The women for the study were informed about the study and their oral and written informed consent was taken. The women were phoned in the postpartum third month and those accepting to participate in the study were registered.

Data Analysis

Data were analyzed with SPSS 21.0 and evaluated with percentages, mean, standard deviation, minimum and maximum values, the non-parametric test Chi-square test and Mann Whitney U test. $P < 0.05$ was considered significant.

Results

Of 86 women included in the study, 45.3% were aged 21 - 25 years, 29% were not literate, 12.8% were smokers, 60.5% were primipara, 98.8% got prenatal care and 22.6% had problems with episiotomy performed in their previous labors.

Eighty-six percent of the women underwent episiotomy and 66% of the women had perineal problems after discharge. The perineal problems experienced were perineal pain in 54% of the women. Eighty-six percent of the women were not informed about problems likely to arise after discharge. Eighty-four percent of the women had someone to help them at home.

The perineal pain score was 6.35 ± 1.97 in the postpartum 2nd hour, 5.70 ± 1.88 in the postpartum 6th hour and 4.10 ± 1.99 in the postpartum third month. The primipara had a higher mean perineal pain score in the postpartum 6th hour and the postpartum 3rd month than the multipara and the pain score in the 6th hour significantly differed between them (p=.005) (Table 1).

The women with intact perineum had a higher pain score in the postpartum 2nd hour and the women having episiotomy and/or spontaneous tears had a higher pain score in the postpartum 6th hour and 3rd month. The difference in pain severity in the postpartum 6th hour and 3rd month between the groups was significant (Table 2).

Forty-eight point eight percent of the primipara and 26.7% of the multipara experienced perineal pain after their discharge, though the difference between them was not significant (p=.166). Perineal pain experienced after discharge did not affect physical activities (79.1%) and did not prevent infant care (88.4%) (Table 3). The primipara had significantly more severe pain during sexual discourse in the postpartum 3rd month than the multipara (p=.001).

Table 1: Postpartum perineal pain scores on VAS

VAS Scores	Primipara (n=52) Mean±SD	Multipara (n=34) Mean±SD	Total (N=86) Mean±SD	Statistics z	p
VAS score in the postpartum 2nd hour	6.02±2.02	6.85±1.81	6.35±1.97	-1.855	.06
VAS score in the postpartum 6th hour	6.10±1.74	5.09±1.96	5.70±1.88	-2.776	.005
VAS score in the postpartum 6th month	4.19±1.54	3.97±2.55	4.10±1.99	-0.0067	.94

z= Mann-Whitney U Test

Table 2: Comparison of perineal pain severity in terms of perineal status

VAS Scores	Intact perineum (n=12) Mean±SD	Episiotomy+ Spontaneous tears (n=74) Mean±SD	Statistics z	p
VAS score in the postpartum 2nd hour	6.42±1.67	6.34±2.02	-0.044	.96
VAS score in the postpartum 6th hour	4.33±1.49	5.92±1.85	-2.717	.007
VAS score in the postpartum 3rd month	2.92±2.64	4.30±1.81	-2.033	.04

z= Mann-Whitney U Test

Table 3: Experiences of perineal pain in postpartum three months

Variables	Primipara (n=52)		Multipara (n=34)		Total (N=86)		Statistics	
	n	%	n	%	n	%	χ^2	p
Having perineal pain after discharge								
Yes	42	48.8	23	26.7	65	75.6	1.918	.16
No	10	11.6	11	12.8	21	24.4		
Using methods for pain relief								
Yes	23	26.7	18	20.9	41	47.7	.625	.42
No	29	33.7	16	18.6	45	52.3		
Having dyspareunia								
Yes	34	39.5	9	10.5	43	50	12.452	.001
No	18	20.9	25	29.1	43	50		
Restriction of physical activities by perineal pain								
Yes	10	11.6	8	9.3	18	20.9	.230	.63
No	42	48.8	26	30.2	68	79.1		
Perineal pain as a barrier to infant care								
Yes	7	8.1	3	3.5	10	11.6	.444	.50
No	45	52.3	31	36.0	76	88.4		

χ^2 = Pearson's Chi-Square Test

Discussion

Pain resulting from tension and tears in the perineal tissue during vaginal deliveries is a symptom affecting relationships of women with their babies and families as well as their physical and psychological wellbeing (Bick et al., 2010). Several factors including episiotomy, use of forceps/vacuum, straining to give birth, prolonged second phase of delivery and infant weight and position cause perineal tissue injury and pain (Christianson, Bovbjerg, McDavitt & Hullfish, 2003).

Episiotomy was found to be performed in all the primipara. It has been reported that the rate of episiotomy is higher in primipara, but that its usefulness is still questionable (Yılmaz, Vural & Bodur, 2010)[]. In the United Kingdom, 350,000 women require perineal repair after vaginal delivery every year. In Turkey, episiotomy is routinely performed in primipara, but it is carried out in multipara when indicated (Altuntug et al., 2010). Although it has benefits such as prevention of lacerations, it has some negative effects during and soon after delivery (Buhling et al., 2006). The rate of episiotomy varies with countries. In a study by Shojaei on primipara, it was found to be 97.3%, consistent with the rate found in the present study (Shojaei, Davaty & Zayeri, 2009).

In the current study, the mean perineal pain score in the postpartum 6th hour was significantly higher in the primipara than in the multipara. The mean perineal pain score in the postpartum 2nd hour was much higher in the women with intact perineum. It can be attributed to use of local anesthesia during perineal repair and persistence of its effect.

In addition, the women having episiotomy and/or spontaneous tears had more severe perineal pain

in the postpartum 6th hour and 3rd month. In a study on Brazilian women, 18.5% of the women having vaginal delivery were found to experience pain in postpartum 48 hours (Francisco, Vasconcellos, Barbosa, Bick & Riesco, 2011). Several studies evaluating perineal pain long after delivery have shown that it persists for longer periods of time. In a study by Declercq, 73% of the primipara having vaginal delivery had perineal pain in the postpartum 2nd month (Declercq et al., 2008). In a cohort study in Australia, 22%, 6% and 3% of the women with vaginal delivery experienced pain in the postpartum 8th, 10th and 24th weeks respectively (Thompson, Roberts, Currie & Ellwood, 2002).

Although the primary cause of perineal trauma related pain is episiotomy, it may be due to perineal tears and lacerations accompanied by episiotomy (East, Sherburn, Nagle, Said & Forster, 2012). Dooley showed that perineal pain continued in the postpartum 8th week (Dooley, Hoesni, Tan & Carey, 2013). Williams evaluated perineal morbidity in the postpartum 12th week in two different studies and reported that the women having vaginal delivery (assisted or normal) had more perineal pain and more problems due to injury of the pelvic basis (Williams, Herron-Marx & Knibb, 2007). Consistent with the literature, the present study revealed that the women had moderate pain in the postpartum 3rd month.

It has been noted in the literature that mechanical forces due to straining, lacerations due to traumatic or assisted deliveries and partial denervation of the pelvic basis have negative effects on functions of the pelvic basis and cause a considerable disruption of sexual desire and arousal, lubrication, orgasm and sexual satisfaction (Farage, Miller, Berardesca & Maibach, 2008).

In the current study, although the primipara were found to experience more severe pain after discharge, most of the women had perineal pain and dyspareunia regardless of parity. The women commented that they took analgesics to relieve their pain.

It has been shown in the literature that episiotomy and second degree perineal tears reduce sexual desire, orgasm and sexual satisfaction and cause more dyspareunia In addition, there is evidence that perineal pain after episiotomy more frequently causes sexual dysfunction and infections than spontaneous tears and have negative effects on postpartum lives of women (Araujo & Oliveira, 2008). Most of the women with perineal pain have dyspareunia in the postpartum three months, which has a negative impact on women's relationships with their spouses (Andrews et al., 2008). Williams reported that women with perineal trauma more frequently experienced sexual problems, dyspareunia and stress and urge urinary incontinence than those with intact perineum (Williams et al., 2007).

Women have physical, social and emotional changes in the postpartum period. This period starts after removal of the placenta and its elements and continues until the postpartum sixth week. They have pain in the episiotomy site, cramps, breast problems, tiredness, infections, feeling incompetent in infant care due to perineal pain and physical and psychological problems related to return to sexual relationships (Shaw & Kaczorowski, 2007).

Conclusions

A higher rate of the primipara and the women with episiotomy had perineal pain soon after birth and in the postpartum 3rd month. Most of the women were not informed about perineal problems and a considerable rate of them faced problems after discharge. Half of the women had dyspareunia and restricted physical activities and infant care due to perineal pain. The study results showed that women in the early and late postpartum period were prevented from daily activities due to perineal pain. In view of the results of the study, it can be recommended that non-pharmacological methods should be used to decrease perineal pain and that guidelines directed towards reducing this pain should be created. In addition, postpartum primipara, especially those with episiotomy, should be visited at home. Further studies should be conducted on larger samples and should include longer follow-up periods.

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