



Measurement and characteristics of perineal pain in primiparous undergoing episiotomy*

Mensuração e características da dor perineal em primíparas submetidas à episiotomia

Mensuración y características del dolor perineal en primíparas sometidas a la episiotomía

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ABSTRACT

Objective: The objective of this study was to characterize and measure perineal pain in puerperal primiparous undergoing episiotomy. **Methods:** A descriptive design was conducted in 40 puerperal primiparous who underwent normal childbirth with episiotomy. Pain was measured with the Brazilian version of the McGill questionnaire (Br-MPQ). **Results:** Participants had a mean pain level of 4.2, and the words that better characterized perineal pain were: sore; hurting, discomfort, annoying, burning, stinging, throbbing, and pressing. **Conclusion:** The intensity of perineal pain was reported to be moderate. The pain characteristics most reported consisted of the sensorial dimension. The findings of this study suggest the need for identification of both the qualitative and quantitative aspects of pain in obstetric services. **Keywords:** Pain; Episiotomy, Postpartum period

RESUMO

Objetivo: Mensurar e caracterizar a percepção dolorosa das puérperas primíparas submetidas à episiotomia. **Métodos:** Trata-se de uma pesquisa descritiva com abordagem quantitativa, realizada com 40 puérperas primíparas submetidas ao parto normal com episiotomia. Para mensuração da dor foi utilizada a escala de categoria numérica e para caracterização a versão brasileira do questionário McGill – Br-MPQ. **Resultados:** Os valores encontrados na avaliação da dor foram de média 4,2 e os descritores que melhor caracterizaram a dor foram: dolorida; que repuxa; incômoda; chata; ardida; pica como uma agulhada; latejante; em pressão. **Conclusão:** A intensidade da dor perineal foi considerada como moderada pelas puérperas. Na caracterização da queixa dolorosa os descritores mais citados foram da dimensão sensorial. Este estudo possibilitou observar a necessidade do reconhecimento dos aspectos qualitativos e quantitativos da dor na prática clínica obstétrica.

Descritores: Dor; Episiotomia; Período pós-parto

RESUMEN

Objetivo: Medir y caracterizar la percepción dolorosa de las puérperas primíparas sometidas a la episiotomía. **Métodos:** Se trata de una investigación descriptiva con abordaje cuantitativo, realizada con 40 puérperas primíparas sometidas al parto normal con episiotomía. Para la mensuración del dolor se utilizó la escala de categoría numérica y para la caracterización la versión brasileña del cuestionario McGill – Br-MPQ. **Resultados:** Los valores encontrados en la evaluación del dolor tuvieron en promedio 4.2 y los descriptores que mejor caracterizaron el dolor fueron: adolorido; que empuja; incómoda; fastidio; que arde; pica como una aguja; palpita; presiona. **Conclusión:** La intensidad del dolor perineal fue considerada como moderada por las puérperas. En la caracterización de la queja dolorosa los descriptores más citados fueron de la dimensión sensorial. Este estudio posibilitó observar la necesidad de reconocimiento de los aspectos cualitativos y cuantitativos del dolor en la práctica clínica obstétrica.

Descritores: Dolor; Episiotomía; Período de posparto

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INTRODUCTION

The puerperium is a period marked by intense vulnerability, meaning that both physical and emotional adverse events may occur. Despite these conditions, considering the pregnancy-puerperium phases, it is the period when women receive less care from the health team and their family, since the newborn receives most attention at this moment. Hence, the female body is reduced to maternal roles only.

In this period, puerperae are expected to be minimally reestablished in order to perform their activities and look after the newborn. However, this is a difficult phase in which women recover from labor and delivery, which is an exhausting event, often associated with painful procedures and surgical interventions, more specifically in the perineal region.

In natural delivery, the pelvic and perineal surface structures are directly affected and suffer constant changes that can result in tissue lesions, due to episiotomy or rupture⁽¹⁾. Over 70% of women undergoing natural delivery are frequently affected by some level of perineal laceration, and this morbidity is sufficiently severe to require surgical repair⁽²⁾.

Episiotomy is a lesion resulting from the surgical enlargement of the vaginal opening by means of an incision in the perineum in the last stage of labor or birth. The purpose is to avoid and minimize lesions to the delivery canal, thus favoring the lowering and liberation of the fetus and avoiding fetal distress and healing complications⁽³⁻⁷⁾.

Nevertheless, it is important to stress that there is no scientific evidence supporting these hypotheses, and the current recommendation of the World Health Organization (WHO), as well as several authors, is to avoid using this procedure, so as to achieve more benefits and reduce morbidity risks when compared to routine practice⁽⁸⁻¹⁰⁾.

In obstetrics, there is a concern with pain occurring during labor, delivery and after a caesarian section. However, perineal pain after vaginal delivery and after episiotomy is often forgotten or ignored by health care professionals.

Pain after episiotomy has been reported as one of the most common maternal morbidities in the postpartum period. Women with episiotomy experience more pain and are subject to more intense blood loss, hematoma, infections, dehiscence, sexual dysfunction, vaginal prolapse and rectal-vaginal fistula compared to other levels of perineal trauma^(6, 11-13).

Furthermore, it is known that accurate pain assessment is essential for the humanization of patient care, since it permits making a correct plan of the intervention that will be done⁽¹⁴⁾. However, since pain is a subjective and

multifactorial experience, it cannot be measured by physical tools that usually permit records of weight, height, temperature and blood pressure figures, because there is no standard tool that would allow the evaluator to objectively measure this internal, complex and personal experience. It should not be evaluated by one-dimensional tools either, like dimensions that vary only in terms of intensity. Instead, it should be measured globally, considering each of its multiple dimensions⁽¹⁵⁻¹⁷⁾.

Hence, multidimensional pain assessment is essential for appropriate management, which justified the relevance of this study, which aimed to measure and characterize the perception of pain in primiparous puerperae who underwent episiotomy.

Within this context, and considering the need to measure and characterize the referred women's perception of perineal pain, the present study used the numeric rating scale (NRS) and the pain descriptors from the multidimensional pain tool – McGill's pain questionnaire adapted for the Portuguese language⁽¹⁸⁾.

METHODS

This descriptive study used a quantitative approach and was developed at a philanthropic maternity located in the city of Ribeirão Preto, São Paulo state. The maternity works within the Brazilian public health system – the Single Health System, which attends to low-risk deliveries and encourages vaginal delivery.

This project was approved by the Research Ethics Committee at the University of São Paulo at Ribeirão Preto College of Nursing, under protocol number 0665/2006.

Forty primiparous puerperae took part in the study. All women had had a natural delivery and received care during the parturition process at the aforementioned maternity. All participants who agreed with the study procedures and voluntarily agreed to participate signed the Free and Informed Consent Form, according to National Health Council Resolution number 196/96.

The puerperae were included in the study if they met the following criteria: primiparae with low-risk pregnancy; minimum age 18 years; literate; who spoke and understood Portuguese; oriented in terms of time and place; normal postpartum; who underwent episiotomy with repair; who felt pain in the episiotomy region and presented no genitourinary pathologies. It was determined that parturients who presented any puerperal adverse events would be excluded from the study, but this was not the case for any of the subjects.

The following tools were used to record the data throughout the study: a data form comprising the variables about the puerperae's profile, obstetric history and procedures, data regarding labor and the newborn; a

numeric rating scale (NRS) represented by a 10 centimeter line, where 0 means “no pain” and 10 represents “the worst imaginable pain”; part III of the Brazilian version of the McGill pain questionnaire – Br-MPQ, validated⁽¹⁸⁾. This tool consists of a set of 68 descriptors divided into 4 main categories and 20 subclasses, all of which refer to the sensory aspect – discriminative, consisting of 10 subclasses and 34 words; affective – motivational, with 5 subclasses and 17 words; subjective-cognitive evaluation, with 1 subgroup and 5 words and mixed category, consisting of 4 subclasses and 12 descriptors. Each subclass is formed by 2 to 6 descriptors. During the application of the Br-MPQ descriptors, the puerperae were asked to choose or not a descriptor that better represented their pain.

A pilot test was done on 15 puerperae in order to evaluate the strength and size of the sample and assess the comprehension and efficacy of the data collection tools by the puerperae. To perform this test, PASS 2002 software (*Power Analysis and Sample Size*) was used and identified that 40 puerperae would be representative for the sample. It was also found that it would be unfeasible to use the visual analogue scale in this study. Despite it being considered of easy administration, little understanding was observed among the puerperae seen at the maternity, who found it difficult to manage; therefore, it was replaced by the numeric rating scale (NRS). It was also observed that, in practice, there were restrictions to the use of the Br-MPQ for this group of women, since it is long, difficult to understand and tiring. Nevertheless, it was used in the study since it is an important tool to appropriately measure the complexity of the painful experience, and also due to its validity and reliability as a scientifically acknowledged instrument.

The data collection was performed between March and May 2007. Before initiating, it was confirmed if the puerperae had received analgesia during labor or if they had used any medication or other pain-relief methods. If any of these resources had been used, the researchers waited at least six hours to initiate the evaluation, counting from the moment the final dose of the therapeutic resource had been administered. It should be noted that the waiting time to initiate the study took into consideration the period of action of the medication used, which is why it varied. Another criterion referred to the performance of any activities, i.e. only puerperae who had gotten up and performed actions like sitting and walking were evaluated.

Data analysis was performed by creating a database using Microsoft Excel for Windows XP. After coding the variables and validating the database by means of double input, an exploratory analysis was performed on the variables and, finally, a confirmatory analysis was done.

Statistical analysis was performed using the “Statistical

Package for Social Sciences” (SPSS) 11.5 for Windows.

RESULTS

The age of the 40 puerperae in the study ranged between 18 and 31 years, with an average of 21 years, standard error of 3.2, and median age 20.5 years. As for their occupation, most (30-75%) were housewives, 2 (5%) were seamstresses, 1 (2.5%) housecleaner, 4 (10%) store cashiers, 1 (2.5%) student, 1 (2.5%) nursing auxiliary, and 1 (2.5%) manicurist. Concerning their marital status, there was a similar number of puerperae who were married, single, and living in consensual union. As for ethnicity, most puerperae reported being white. In terms of education, 23 (57.5%) had attended secondary-level education, though most did not finish their studies.

The 40 puerperae participating in the study were primiparae, according to the pre-established criterion. However, four of them were in their second pregnancy, having suffered a previous miscarriage.

The gestational age observed according to the amenorrhea time ranged between 34 and 45 weeks, with an average 39 weeks, standard deviation of 2.1 weeks and median of 39 weeks. On the other hand, the gestational age observed according to ultrasound ranged between 35 and 41 weeks, with an average 38.7 weeks, standard deviation of 1.3 weeks and median of 39 weeks. It was also observed that some ultrasound data had been lost.

One of the studied puerperae did not attend prenatal care and the number of appointments attended during pregnancy ranged between 0 and 11, with an average 7.7 appointments, a standard deviation of 2.2 and median of 8 appointments. It was observed that 85% (34) of the puerperae performed more than six prenatal appointments.

The duration of labor, measured from the active stage of labor until birth, obtained by means of data on the delivery chart, varied between a minimum of 31 minutes and a maximum of 9 hours, with an average 7.35 hours, standard deviation of 3.5 hours and median of 8 hours. The number of vaginal exams, also evaluated from the active stage of labor and based on the delivery chart, was a minimum of 1 and maximum of 10 examinations, mean 3.6, standard deviation of 1.7, and median of 3 examinations.

The variables regarding the newborns showed that most were boys, 22 (55%). The mean weight was 3,068.6 grams, median up to 3,070 grams, and standard deviation of 371.4 grams. The lowest birth weight was 2,160 grams and the highest was 4,005 grams. Their size ranged between 41.5 and 52.5 centimeters, with a mean 48.5 centimeters, standard deviation of 2.3 centimeters and median of 48.5 centimeters.

By studying the pain level measured by the NRS, it

was observed that the values found in the evaluation were: mean of 4.2, standard deviation of 2.0, minimum of 1 and maximum of 8.

Regarding the characterization of pain according to the Br-MPQ descriptors considering the sensory, affective, evaluative and mixed categories, Table 1 shows the most frequent descriptors. The selected descriptors were classified according to the obtained frequencies.

Table 1 – Distribution of Br-MPQ descriptors most frequently referred by the primiparae puerperae subject to episiotomy. Ribeirão Preto – SP, 2007

Pain characterization – Br-MPQ			
Descriptors	Categories	n	%
Aching	sensory	27	67.5
Squeezing	sensory	24	60.0
Troublesome	evaluative	23	57.5
Annoying	affective	22	55.0
Smarting	sensory	19	47.5
Pricking	sensory	18	45.0
Beating	sensory	17	42.5
Pressing	sensory	15	37.5

DISCUSSION

Using the puerperae's report and interpretation about perineal pain, by means of specific pain one-dimensional and multidimensional measurement tools, in this study, it was observed, moderate pain intensity was observed through the numeric rating scale (NRS), with a mean of 4.2. Similar to observations by other authors⁽¹⁹⁻²¹⁾, this study showed that the NRS is easy to administer and well received by the puerperae; however, it was found that it does not replace the use of multidimensional pain evaluation protocols.

In terms of the characterization of the perineal pain presented by the puerperae who underwent episiotomy, in the pain evaluation, it was verified that the descriptors and ratings that best defined post-episiotomy pain were: 1st-aching (sensory) 67.5%, 2nd-squeezing (sensory) 60%, 3rd-troublesome (evaluative) 57.5%, 4th-annoying (affective) 55%, 5th-smarting (sensory) 47.5%, 6th-pricking (sensory) 45%, 7th-beating (sensory) 42.5%, 8th-pressing (sensory) 37.5%.

The study results show that there was a greater tendency to choose descriptors from the sensory category in both groups. This fact was expected since this category comprises 50% (34 words) of the Br-MPQ descriptors, while the affective category consists of 25% (17 words), the evaluative of 7.3% (5 words) and the mixed of 17.7% (12 words).

Some authors⁽²²⁾ have reported that this uneven distribution of the descriptors concerning the affective and evaluative sensory components, in addition to the mixed

category, which is also of a sensory nature, has been the reason for questioning, since it is believed that this proportional difference compels patients to choosing more descriptors from the sensory category. Despite these criticisms, they believe that the questionnaire definitely helps patients to communicate their painful experience.

In scientific literature, we did not find any pain evaluation studies in the same situation considered in our study. Among the studies about pain resulting from a surgical incision, one study⁽²³⁾ that was performed with 48 postoperative patients, who had undergone orthopedic, gynecologic, vascular, and abdominal surgeries, revealed, using the Magnitude Estimation Method, that the most attributed descriptors expressed sensory, affective, and evaluative features of the painful experience, according to the rating in the McGill pain questionnaire for Portuguese language. The authors of the present study also emphasize that literature appoints descriptors from the three groups as chosen by patients undergoing various surgical procedures.

With the purpose of getting to know the quality of postoperative pain, another study⁽²⁴⁾ performed with 88 adult postoperative patients revealed that the painful sensation was also described using descriptors from the sensory, affective, and evaluative categories, and that most of the chosen words belonged to the sensory category.

The study⁽²⁵⁾ performed with 40 postoperative adult patients, aiming to assess the applicability and validity of the brief version of the McGill pain questionnaire, found that the most chosen descriptors belonged to the sensory and affective groups.

However, comparing the data obtained in the present study, using the Br-MPQ, with the information from other studies is a difficult and limited task, due to the language differences and the validation of the questionnaire to Portuguese language, since there are validations by different authors who used descriptors different from those used in the present study, which was based on the purpose of validation⁽¹⁸⁾, although we did find, in Brazilian scientific literature, proposals for an adaptation^(22,26).

Furthermore, it is important to highlight that the application of the Br-MPQ was productive because it helped the puerperae to find the words that expressed the exact meaning and characteristics of the painful experience. During its administration, however, some limitations appeared for this group in terms of the prolonged application time and the difficulty the puerperae had to understand and interpret the meaning of some words.

As to these limitations, it is acknowledged⁽²²⁾ that some reflections have been made, with a consensus that the average time needed to apply the Br-MPQ is more than what is needed for an intensity scale, but that the amount and quality of the information obtained with the Br-

MPQ are superior. However, it is suggested that a reduced questionnaire, similar to the McGill Short Form, be designed and validated. Another fact to be considered is that the individuals with a low educational level, the elderly, or those with difficulty to concentrate showed more difficulty to understand the descriptors^(22,27).

In our study, most of the puerperae had not finished secondary-level education, which suggests that this fact may have influenced the comprehension of some descriptors. However, we believe that the fact that some descriptors are not common to the puerperae's vocabulary may also have interfered. Another factor to be considered is the moment they were living, in which they are generally distracted, focusing most of their attention on their baby.

The implications and relevance of this study can be evidenced by the set of international policies to promote Safe Motherhood (WHO, PAHO), which aim to reduce maternal morbidity, among which perineal pain in the puerperium has been one of the most common occurrences with effects on women's health and on maternal care practice. The possibility of having options regarding the management and evaluation of appropriate treatments will only help to improve the quality of care to the puerperae if they are provided with better reestablishment and the willingness to perform maternal functions.

The humanization of care to puerperal women demands, at first, giving visibility to the needs of women in this period, which are very often underestimated by the professionals involved in health care, who usually

prioritize risks and pathological aspects. Pain tends to be disregarded, considered part of the process, by the professionals as well as the women, despite the suffering it causes. There is a need to develop educational strategies directed to women and health care professionals, aimed at valuing pain complaints, which can be evaluated based on its characteristics and by measuring its intensity.

Therefore, the obtained results should be disseminated to those who are directly or indirectly involved with the puerperal period, including: obstetric physicians; nurses, nursing auxiliaries, physiotherapists, health care service/hospital managers; and those who design policies and strategies related to women's health.

CONCLUSION

The puerperae who underwent episiotomy considered perineal pain intensity as moderate. In the characterization of the complaint by means of the Br-MPQ, the most frequent descriptors were: 1°- aching, 2°- squeezing, 3°- troublesome, 4°- annoying, 5°- smarting, 6°- pricking, 7°- beating, 8°- pressing. This study showed that there is a need to recognize the importance of both qualitative and quantitative aspects of pain in obstetric clinical practice, so that therapeutic measures that are more effective can be adopted and thus help to improve puerperae care service.

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