

Episiotomy scar as a physiotherapeutic problem - case study

Blizna po episiotomii jako problem fizjoterapeutyczny - studium przypadku

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Abstract

The article presents the case of a 28-year-old woman after vaginal delivery assisted by the use of a vacuum extractor. During delivery, the II° perineal rupture and pelvic floor tissue damage occurred. The patient came to the urogynecological physiotherapy practise because of major pain associated with the episiotomy scar. The article describes effects of physiotherapy.

Key words: episiotomy, pelvic floor pain, physiotherapy

Abstrakt

W pracy przedstawiono przypadek 28 letniej kobiety po porodzie drogą pochwową, wspomaganym użyciem wyciągu próżniowego. W trakcie porodu doszło do pęknięcia krocza II° i uszkodzenie okolicznych tkanek dna miednicy. Pacjentka zgłosiła się do gabinetu fizjoterapii uroginekologicznej z powodu dużych dolegliwości bólowych związanych z blizną po episiotomii. W pracy opisano postępowanie fizjoterapeutyczne i jego efekty.

Słowa klucz: nacięcie krocza, dolegliwości bólowe dna miednicy, fizjoterapia

Introduction

Episiotomy (episiotomy) is the most common medical procedure performed in the second phase of vaginal delivery. Its purpose is to protect the perineum from spontaneous rupture. The decision on this procedure is made by the obstetrician after prior evaluation of the stretch ability of the perineum and its elasticity. The World Health Organization, however, denies the need for routine perineal incision in women giving birth.¹

An incision of the perineum is the incision of the vaginal walls in the lateral-medial direction. During the procedure, the superficial transverse perineal muscle and the bulbar-spongy muscle are also incised. Unfortunately, the episiotomy does not prevent further serious damage to the perineal tissues. From a physiological point of view, tightly stretched tissues that are subjected to an incision are more likely to break down further and cause serious injuries. In the case of an episiotomy, there is a special concern of damage to the external anal sphincter. The dysfunction of this muscle is quite often associated with the existence of disturbances in the adjacent structures of the pelvic floor.² The motor innervation of the external anal sphincter supplies the muscle puborectalis, the anal canal and the perineal skin. The perineal branches of the vulva innervate the vaginal walls, the base of the bladder, as well as the sciatio-cavernous and bulbar-spongy muscles. Moreover, they innervate the external anal sphincter and the rectal pubis.³

The international classification of perineal tears distinguishes the following grades of intrapartum perineal trauma:

I ° - trauma involving the skin and vaginal mucosa

II ° - perineal muscle injury, no anal sphincter

III ° - trauma of the perineum and the sphincter complex

IV ° - trauma of the perineum, the sphincter complex and the rectal mucosa⁴

Proper function and innervation of muscles: external anal sphincter, internal anus and puborectal sphincter ensure the continuation of stool and gases in patients after vaginal delivery. The dysfunction of any of them is therefore associated with a serious risk of pelvic floor problems.⁵

Case report

A 28-year-old patient, at 40 weeks of pregnancy, was referred to the Clinical Hospital in the Obstetrics Ward for labor induction. The next day, a Foley catheter was applied, and in the afternoon, oxytocin was administered intravenously.

¹ World Health Organization, *Episiotomy for vaginal birth*, 2007

² Santoro G, Wiczorek P, Bartram CI: *Pelvic Floor Disorders*. Springer Verlag, Philadelphia 2012.

³ Kościński T: *Choroby struktur dna miednicy*. Wydawnictwo Zysk i S-KA, Poznań 2006

⁴ Kalinka J., Baczyńska M.: Okołoporodowe pęknięcia krocza – częstość występowania, czynniki ryzyka, następstwa oraz sposoby zapobiegania, *Ginekologia po Dyplomie* 2014;16(1):28-32

⁵ Sudoł - Szopińska I., Kołodziejczak M.: Nietrzymanie stolca i gazów – problem wstydlivy, nieznany, niedoceniany. *Znaczenie endosonografii, Postępy Nauk Medycznych*, t. XXVI, nr 8, 2013, s.557 -563

It took a long time to open the neck (more than 13 hours). The second stage of labor was significantly prolonged, and the fetal heart rate visibly slowed down, so it was decided to support the delivery with the use of a vacuum extractor. During the delivery, the patient's perineum was incised, the damage to which during the second stage of labor became much worse. After delivery, the perineal tissues were sutured, but the doctor performing the procedure noticed a large rupture of the cervix. The patient was discharged in good general condition. Second degree perineal tears are described in the medical records. After delivery, the patient reported serious problems with the healing of the perineal wound. She also reported that blood and fluid leaked from the wound for two months after giving birth. The woman was under gynecological control.

The patient came to the physiotherapy practice 5 months after giving birth. In the interview, she reported very severe pain in the perineum, which made it impossible to have sexual intercourse, moreover, pain in the perineum significantly hindering the woman's daily functioning. The patient limited the walks with the child to half an hour, also the longer sitting caused discomfort. The woman did not report any problems with the urinary system, there was no urinary, gas or stool incontinence. She suffered from constipation and hemorrhoids. The patient was under a gynecological check-up in the 10th week after delivery. In the opinion of the doctor, the scar healed properly.

Physiotherapeutic examination

First, the physiotherapeutic examination included the assessment of abdominal work. There was no rectus abdominal muscle dehiscence. The diaphragm and the ilio-lumbar muscles were in great tension. The incision scarring and pelvic floor muscle scars were then assessed. The episiotomy scar ended near the external anal sphincter, and also involved the deep transverse perineal muscle. On palpation the patient reported that the scar was very sore (on the VAS-8 pain scale). The scar was very hard, not elastic. Gluteal muscle tone and hip adductors were also assessed. A large number of trigger points have been observed within the gluteal muscle. During the examination, symptoms of the right pear-shaped muscle and the right and left iliac-lumbar muscle were also revealed.

Rehabilitation

During the first visit, a scar was performed after the incision of the perineum. The therapy started with loosening the surrounding tissues, then the scar was prepared directly using specific techniques - pressure, up-down mobilization, lateral-medial, twisting / breaking the scar. After the end of the procedure, the patient noted a significant reduction in the pain of the scar (5 on the VAS pain scale). Subsequent physiotherapeutic consultations were held once a week. The first visits included working with the right and left ilio-lumbar ligaments, relaxing the gluteal muscles and thigh adductors. At each visit, time was also allocated to mobilize the episiotomy scar. After the fourth visit, the patient reported a reduction in symptoms while sitting and the possibility of taking longer walks with the child (up to two hours). It was also possible to have sexual intercourse, pain during - 5 on the pain scale VAS.

The patient had a total of 14 visits to the physiotherapeutic office, during which the pelvic floor muscles were relaxed. Their correct assessment was previously impossible due to the high pain of the episiotomy scar. During each visit, work was also done on making the scar more flexible and reducing the tension in the tissues around the scar. After the physiotherapeutic procedure was completed, the patient reported no pain in the area of the scar after incision of the perineum during everyday activities. Pain during intercourse occurred mainly when the penis was inserted into the vagina (VAS 3 pain scale), later it was much less noticeable. The patient was achieving orgasms.

Summary

Vaginal delivery is associated with a high risk of intrapartum perineal trauma. The damage to the muscles and tissues of the pelvic floor significantly increases the risk of depletion of the reproductive organ and the occurrence of all types of incontinence.⁶ It is also worth noting that in many maternity units in Poland, episiotomy is an undisputed element of childbirth. Statistics show that every second childbirth has an incised perineum, including almost every woman giving birth for the first time.⁷ Although the episiotomy wound heals properly, the resulting scar may be the cause of many pain ailments in obstetricians. In postpartum management, it seems necessary to assess the functionality of the scar in relation to the surrounding tissues.

Literature

1. World Health Organization, Episiotomy for vaginal birth, 2007
2. Santoro G, Wiczorek P, Bartram CI: Pelvic Floor Disorders. Springer Verlag, Philadelphia 2012.
3. Kościński T: Choroby struktur dna miednicy. Wydawnictwo Zysk i S-KA, Poznań 2006
4. Kalinka J., Baczyńska M.: Okołoporodowe pęknięcia krocza – częstość występowania, czynniki ryzyka, następstwa oraz sposoby zapobiegania, Ginekologia po Dyplomie 2014;16(1):28-32
5. Sudół - Szopińska I., Kołodziejczak M.: Nietrzymanie stolca i gazów – problem wstydlivy, nieznan, niedoceniany. Znaczenie endosonografii, Postępy Nauk Medycznych, t. XXVI, nr 8, 2013, s.557 -563
6. Patel DA, Xu X, Thomason AD, [et al.]. Childbirth and pelvic floor dysfunction: an epidemiologic approach to the assessment of prevention opportunities at delivery. Am J Obstet Gynecol.2006, 195, 23-28
7. Nacięcie krocza - czy można tego uniknąć? Fundacja Rodzić po Ludzku <https://www.rodzicpoludzku.pl/porod/naciecie-krocza-czy-mozesz-tego-uniknac.html>

⁶ Patel DA, Xu X, Thomason AD, [et al.]. Childbirth and pelvic floor dysfunction: an epidemiologic approach to the assessment of prevention opportunities at delivery. Am J Obstet Gynecol.2006, 195, 23-28

⁷Nacięcie krocza - czy można tego uniknąć? Fundacja Rodzić po Ludzku <https://www.rodzicpoludzku.pl/porod/naciecie-krocza-czy-mozesz-tego-uniknac.html>