DOI: 10.5350/SEMB.20160315015014

Symphysis Pubis Diastasis After Difficult Birth: A Case Report

Mesut Mehmet Sonmez[1], Meric Ugurlar[1], Ozge Yapici Ugurlar[2], Ayse Keles[3], Osman Tugrul Eren[1]

ABSTRACT:

Symphysis pubis diastasis after difficult birth: a case report

Objective: Symphysis pubis diastasis is an uncommon peripartum complication that might result in a serious distress to the patient. With pregnancy, the gap increases by at least 2 to 3 mm, which is thought to be caused by the slackness of ligaments supporting the joint. The diagnosis of diastasis is based on the persistence of symptoms and a symphysis pubis separation of more than 10 to 13 mm on imaging.

Case report: We report a 34-year-old multigravida woman with gestational diabetes at nearly 40 weeks of gestation and is presented with a spontaneous onset of pelvic pain, difficulty in walking after a shoulder distosi labor and diagnosed symphysis pubis diastasis.

Conclusion: After child birth if there is increasing pain with hip movement and pain causing prolonged immobilization, symphysis pubis diastase should be suspected and further investigation is recommended.

Keywords: Symphysis pubis, diastasis, pelvic pain, postpartum

ÖZET:

Zor doğum sonrası simfizis pubis diastazı: Olgu sunumu

Amaç: Simfizis pubis diastazı hastada ciddi sıkıntıya yol açabilen nadir bir perinatal komplikasyondur. Gebe bir kadında, simfizis pubis aralığının eklemi destekleyen bağların hormonlara bağlı meydana gelen gevşekliği nedeni ile en az 2-3 mm arttığı düşünülmektedir. Simfizis pubis ayrışmasının tanısı semptomların varlığı ve direkt grafide simfizis pubis ayrışmasının 10-13 mm arasında olması ile konur.

Olgu sunumu: Biz bu çalışmamızda 34 yaşında, yaklaşık 40 haftalık multigravida ve gestasyonel diyabeti bulunan, zor doğum sonrası yürümekte zorluk çeken ve spontan pelvik ağrısı olan ve simfizis pubis ayrışması tanısı konan bir olguyu sunmayı amaçladık.

Sonuç: Doğum sonrası gebede kalça hareketleri ile artan ağrı ve ağrıya bağlı olarak uzamış hareketsizlik durumunda simfizis pubis ayrışmasından şüphenilmeli ve bu yönde ileri tetkik yapılmalıdır.

Anahtar kelimeler: Simfizis pubis, diastaz, pelvik ağrı, postpartum

Ş.E.E.A.H. Tıp Bülteni 2017;51(1):88-90

[1]Sisli Hamidiye Etfal Education and Research Hospital, Department of Orthopaedics and Traumatology, Istanbul - Turkey
[2]Trakya University School of Medicine, Department of Radiology, Edirne - Turkey
[3]Sisli Hamidiye Etfal Education and Research Hospital, Department of Obstetrics and Gynecology, Istanbul - Turkey

Address reprint requests to / Yazışma Adresi:
Meric Ugurlar
Sisli Hamidiye Etfal Education and Research Hospital, Department of Orthopaedics and Traumatology, Istanbul - Turkey

Telefon / Phone: +90-212-373-5000

E-mail / E-posta:
mugurlar@yahoo.com

Date of receipt / Geliş tarihi:
February 19, 2016 / 19 Şubat 2016

Date of acceptance / Kabul tarihi:
March 15, 2016 / 15 Mart 2016

INTRODUCTION

Pubic symphysis diastasis is one of the uncommon peripartum complications that causes serious pain and distress to the patient (1,2). The normal pubic symphysis gap ranges from 4 to 5 mm in a nonpregnant woman. The gap increases by at least 2 to 3 mm with pregnancy, which is thought to be caused by the slackness of the joint. It is considered that the diastasis is to be related with hormonally induced ligamentous laxity (2). The diagnosis of diastasis is based on the complaints of the patient and a symphysis pubis separation of more than 10 to 13 mm on imaging (3-6). However, the exact incidence of the diastasis is not known because the pain complaint of the patients is connected to birth and usually further examinations are not performed in these patients. There are several retrospective studies reporting a similar incidence (7). The exact incidence of diastasis still remains unclear.

If the diastasis is less than 25 mm, treatment is conservative with bed rest and gradual mobilization. In extreme cases surgical treatment may be required. Although the condition may recur, the prognosis for subsequent pregnancies remains good. Multiparity, forceps-assisted delivery, shoulder dystocia, maternal developmental dysplasia of the hip and prior pelvic trauma are the predisposing factors for the diastasis mentioned in previous studies that were performed during the 1930s to 2000s and were not statistically supported (2). Most patients improve symptomatically and return to daily physical activities within the first few weeks, while some patients suffer from persistent pain. In some studies, the separation gap appeared to predict the outcome (2), while it did not in other studies (6).

CASE REPORT

A 34-year-old multigravida with gestational diabetes at nearly 40 weeks of gestation presented with a spontaneous onset of pelvic pain and difficulty in walking after a shoulder dystocia delivery. The birth weight of the baby was 4040 grams and he had right brachial plexus palsy findings.

On physical examination, the patient described pain in the suprapubic region and the pain was getting worser with the hip joint movements. She was having difficulty during weight-bearing activity. She did not have any pain at the sacroiliac region. Her VAS score was 9 at the postpartum 1st week. Pelvic radiography showed a 17.4 mm diastasis of the symphysis pubis (Figure-1).

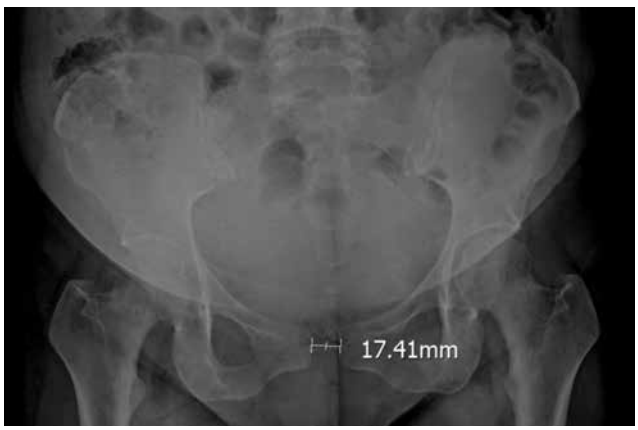

Figure-1: Postpartum second day pelvis x-ray shows the 17.4 mm diastasis of the symphysis pubis.

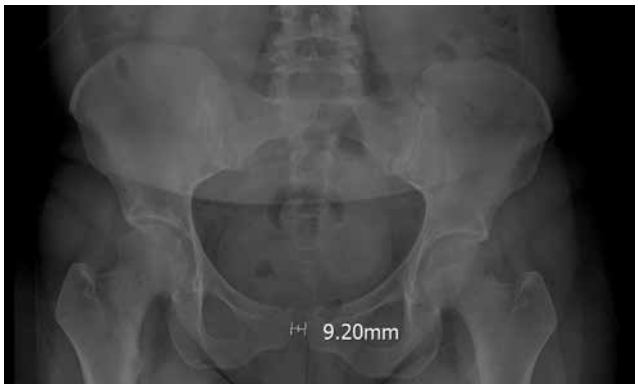

Figure-2: The control x-ray at the end of sixth week of the treatment shows the reduction of symphysis pubis.

Treatment was conservative, with 3 weeks of bed rest, followed by walking with the assistance of double crutches for the next 3 weeks. After the assessment of the control x-ray at the end of 6th week and after the full reduction of the pain, the patient was allowed for full weight-bearing (Figure-2). At the end of 6th week her VAS score was 2.

At the first year follow-up VAS score was 1 and she did not have any complaints of any pain or disability.

DISCUSSION

Most of the pregnant women complain of pain at the end of 3rd trimester of normal pregnancy; however, pain usually reduces in the postpartum period. In our case, there was exacerbation of the pain in the suprapubic region during the post-partum period and there was a difficulty and pain in both walking and hip movements.

Pelvic joint ligaments relax with hormones, enabling normal vaginal delivery during pregnancy. The symphysis pubis diastasis results of partial or complete rupture. Macrosomic fetus, small pelvis of mother, rapid progression of second stage of labor and rapid descent of presenting part, epidural anesthesia and pelvic trauma are the main reasons of the rupture. Abnormality due to congenital dysplasia, osteomalacia, chondromalacia, rickets, tuberculosis have been reported as other risk factors for the diastasis. However, these factors are speculative,

which were not verified statistically (8).

Reported incidences of the diastasis vary from 1/300 to 1/30,000 in western countries, the incidence was 1/388 in a later study (2,8). The detection rate depends on physician's concern and it may not be accurate if patients and physicians neglect a diastasis considering pubic pain as a usual symptom after labor. The differences in the incidences might be due to physicians' awareness and ethnic anatomical difference.

Good results with conservative treatment have been reported (3,6). Most of the orthopaedic surgeons consider that their patients with diastasis do not necessitate an operation and will recover with conservative treatment. However, separation more than 4 cm is usually associated with rupture of sacroiliac joint and instability of the pelvic ring necessitates a surgical intervention (2,8,9). Additionally, complications such as bladder and urethral injury and hematoma can be detected (10). Surgical treatment should be planned if any complication occurs.

Even though there are many articles in the literature, there is no consensus on diastasis today. After child birth if there is increasing pain with hip movement and pain causing prolonged immobilization, symphysis pubis diastasis should be suspected and further investigation is recommended.

REFERENCES

1. *Crim MW, Moss SW. Pelvic diastasis in pregnancy. Am Fam Physician 1987; 35: 185-6.*
2. *Callahan JT. Separation of the symphysis pubis. Am J Obstet Gynecol 1953; 66: 281-93.* **[CrossRef]**
3. *Culligan P, Hill S, Heit M. Rupture of the symphysis pubis during vaginal delivery followed by two subsequent uneventful pregnancies. Obstet Gynecol 2002; 100: 1114-7.* **[CrossRef]**
4. *Cowling PD, Rangan A. A case of postpartum pubic symphysis diastasis. Injury 2010; 41: 657-9.* **[CrossRef]**
5. *Chang JL, Wu V. External fixation of pubic symphysis diastasis from postpartum trauma. Orthopedics 2008; 31: 493.* **[CrossRef]**
6. *Chang D, Markman BS. Images in clinical medicine. Spontaneous resolution of a pubic-symphysis diastasis. N Engl J Med 2002; 346: 39.* **[CrossRef]**
7. *Yoo JJ, Ha YC, Lee YK, Hong JS, Kang BJ, Koo KH. Incidence and risk factors of symptomatic peripartum diastasis of pubic symphysis. J Korean Med Sci 2014; 29: 281-6.* **[CrossRef]**
8. *Seth S, Das B, Salhan S. A severe case of pubic symphysis diastasis in pregnancy. Eur J Obstet Gynecol Reprod Biol 2003; 106: 230-2.* **[CrossRef]**
9. *So YH, Park SG, Kal CW, Kim MJ, Lee JH, Kim YC. Separation of symphysis pubis during vaginal delivery - report of 5 cases. Korean J Obstet Gynecol 2000; 43: 2310-4.*
10. *Kefi A, Cimen S, Aslan G, Cihan A, Secil M, Esen AA. Urethral injury as a complication of isolated diastasis pubis: case report. Int Urol Nephrol 2006; 38: 501-3.* **[CrossRef]**