

Post Partum Pubic Diastasis: A Case Report.

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ABSTRACT

Post-partum pubic symphysis diastasis is termed as abnormally wide gap between the two pubic bones following vaginal delivery. It is a rare and under diagnosed condition following acute pelvic pain. We are presenting a case of post partum pubic diastasis, in a 31 year old female with complain of pain, tenderness over pubic area and unable to walk. Patient was diagnosed with x-ray and MRI and treated surgically.

Keywords: Post-partum pubic diastasis, Pubic Symphysis.

INTRODUCTION

Post-partum pubic symphysis diastasis is an uncommon event and reported incidence varies from 1 in 300 to 1 in 30,000 deliveries.^[1, 2]

Mild diastasis of the pubic symphysis is considered to be physiological in pregnancy & is thought to be caused by the excess production of the hormone relaxin during pregnancy, greater separation can lead to tenderness on palpation and disability to ambulate.

Factors that contribute to a rupture of pubic symphysis are rarely defined. Nevertheless it seems clear that multiparity, macrosomia accompanied by cephalopelvic disproportion, Mc Roberts maneuver, forceps delivery, maternal connective tissue disorders, prior pelvic trauma and hyperflexed legs may predispose to pubic symphysis diastasis.

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Diagnosis can be confirmed rapidly by pelvic X-ray and CT scan. Additionally, MRI serves to exclude soft tissue injury. Treatment modality consists of conservative management with pelvic Girdle binder, analgesia, bed rest in lateral

decubitus and physical therapy. In extreme case, operative treatment is a successful alternative method.

We are presenting a case of post partum pubic diastasis, in a 31 year old female with complain of pain, tenderness over pubic area and unable to walk. Patient was diagnosed with x-ray followed by CT scan and was treated surgically.

CASE REPORT

A 31 years old primigravida who delivered at other hospital came with the complaints of pain over anterior aspect of pubic & suprapubic area after delivery and difficulty in walking, standing and sitting. Attempts to abduct both the legs were associated with extreme pain in pubic, suprapubic area & also in lower back and both hips. On the physical examinations, the patients had a tender and palpable dehiscence of the pubic symphysis. There were no symptoms of active bleeding or lesions of urinary tract or neurologic deficits. Patients was normal statured & not obese. Her antenatal course was uncomplicated. Past history was not significant.

X-ray pelvis with both hip anteroposterior views was done which revealed a pubic symphysis separation [Figure 1] and also confirmed by CT scan [Figure 2].

Blood investigations were done and were found to be normal except vitamin D levels, which were found to be significantly low (6.4) ultrasonography

of abdomen and pelvis, revealed no significant abnormality.



Figure 1: X-ray of the pelvis showing pubic symphysis diastasis.



Figure 2: CT scan of pelvis showing pubic symphysis separation.

Initially pelvic binder was applied [Figure 3] followed by bed rest and analgesia



Figure 3: X-ray of pelvis after application of pelvic binder.

The patient underwent open reduction and internal fixation by means of plate and screw and wire [Figure 4].

The patient received physical therapy to ambulate and patient could walk with the help of walker on the 3rd post-operative day. After 2 weeks, the patients were able to ambulate without complaints and to take care of her child a post-operative

radiographic control determined the correct position of the implant.



Figure 4: Post-op X-ray showing open reduction and internal fixation by means of plate and screw and wire.

DISCUSSION

Post-partum pubic symphysis diastasis is an uncommon event and under diagnosed condition following acute pelvic pain. It is common to find many women complain of groin and pubic pain during pregnancy, which is due to physiological separation of symphysis pubis, which contributes to increased stress during delivery, resulting in Post-partum pubic symphysis diastasis.

Pubic symphysis is a hyaline cartilage with an interposed soft fibrocartilaginous disc. During pregnancy, there is ligamentous relaxation and widening of sacroiliac joint and symphysis pubis probably due to action of relaxin and progesterone hormone. Diastasis of more than 10 mm to 13 mm is considered as sub-dislocation or a gap. A diastasis more than 14 mm is usually associated with damage of the sacroiliac joint and laceration of one or both sides of the sacro-iliac ligament.^[4, 5] Factors for post partum pubis diastasis are difficult labour, multiparity, cephalopelvic disproportion, precipitate labour, difficult forceps delivery and pre-existing pathology of pelvic bones.^[6] The most common factors contributing for the condition is hormonal and in McRoberts manoeuvre when there is prolonged placement of patient's legs in hyper flexed position.^[3, 7]

Post partum pubis diastasis can be confirmed with simple x-ray of pelvis, use of MRI is considered to rule out soft tissue injury, sacro-iliac joint injury, sclerosis and osteomyelitis.

Treatment modality consists of conservative management with pelvic binders/condylar plasters, bed rest and analgesics. Other alternative treatment includes TENS (Transcutaneous Electric Nerve Stimulation), external heat or massage. Surgical treatment includes correction with open reduction and internal fixation with plate or wiring if the diastasis is greater than 2.5 cm and not responding to conservative management for 6 weeks.^[8]

CONCLUSION

Pubic symphysis diastasis is an uncommon but often underestimated injury after vaginal delivery that can lead to significant chronic disability. Patients should be evaluated in the peripartum period for post partum pubic diastasis who are experiencing suprapubic, sacroiliac or thigh pain. There is a need for awareness among medical professionals about the condition as this has increased incidence of recurrence in subsequent pregnancies.

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