

Spontaneous Pubic Diastasis: Rare Case Report

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Abstract

The pubic symphysis is a midline, nonsynovial joint that connects the right and left superior pubic rami. The interposed fibrocartilaginous disk is reinforced by a series of ligaments that attach to it. The joint allows very limited movement of approximately 0.5-1mm. Under hormonal stimulation during pregnancy, there is widening of the symphysis pubis and the sacroiliac joints. Diastasis wider than 15 mm is considered subdislocation and is generally associated with pain, swelling, and occasionally deformity. Most cases can be treated conservatively. However, internal or external surgical stabilization may occasionally be required.

Abbreviations: USG, MRI

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I. Introduction

A pubic symphysis diastasis (PSD, diastasis symphysis pubis) is defined as excessive widening of the system of anatomical structures that make up the pubic symphysis (above the physiological norm of 10 mm), occurring during pregnancy or postpartum. It is total separation or instability of the symphysis without breaking the pubic bones. It is a rare but debilitating condition that occurs following childbirth via vaginal delivery. Thus resulting in considerable and prolonged morbidity for parturient women. Incidence reported between 1 in 300 to 1 in 30000 pregnancies worldwide. It characteristically presents as suprapubic pain, swelling, tenderness and edema. Since there is no consensus in the scientific literature on the definition, etiopathogenesis, and management of this rare complication, we attempted to review the literature on the subject and present a rare case report of Spontaneous pubic diastasis.

CASE REPORT

A 38 year old presented to Goa Medical College and Hospital as a case of gravida 7 para 3 abortion 3 at 38.3 weeks in labour. Her antenatal period was uneventful. She had spontaneous onset of labour at term, with the first stage of labour lasting five hours and second stage spanning 30 minutes. Augmentation was done with oxytocin infusion, which was started during the terminal part of the first stage. She delivered a healthy term male baby weighing 3.7 kg following a mediolateral episiotomy. During parturition, she had a difficulty in walking and severe anterior pelvic pain after the birth of her baby. No Mc Roberts manoeuvre or epidural analgesia was offered to the patient at any time during her labour.

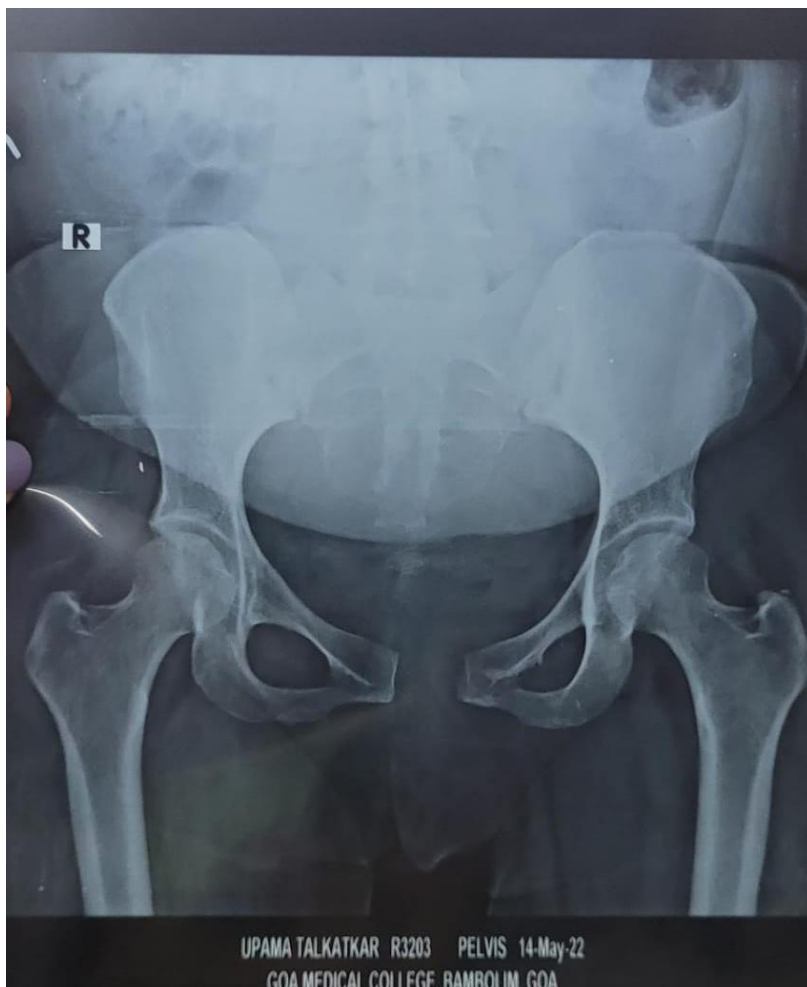
SIGNS AND SYMPTOMS

Immediately post delivery, she was unable to walk, get up from her bed, turn from side-to-side or hold her child due to severe pain in the region of the pubic symphysis. There was no incontinence of urine or faeces but patient was catheterised since the patient was not able to move.

DIFFERENTIAL DIAGNOSIS

- 1) Osteomyelitis or septic arthritis of pubic symphysis
- 2) Sciatica
- 3) Infection of the genitourinary system
- 4) Deep vein thrombosis
- 5) Inflammation of the pubic symphysis

DIAGNOSIS



- An orthopaedics opinion was taken on 1st postnatal day in view difficulty in walking with pain in right leg
- X ray of bilateral hip joint taken, which revealed a gap in the region of the pubic symphysis with the distance between the two bones of nearly 2 cm .
- A diagnosis of intrapartum pubic symphysis diastasis (PSD) was made

INVESTIGATIONS

- 1) X-ray image of pelvic girdle in AP: Simple and quick way to determine the width of a symphysis pubis. A diagnosis can be made when the intrapubic gap is greater than 10 mm at the narrowest point
- 2) Other non-invasive tests -USG, MRI

MANAGEMENT

- a. The patient was given analgesics, anti-inflammatory drugs, and bed rest in lateral decubitus position.
- b. Pelvic binder was put as advised by the orthopaedics.
- c. Catheter was omitted on 3rd postnatal day patient.
- d. Patient was asked to mobilise with the pelvic binder.
- e. Discharged on 5th postnatal day and was asked to follow up in orthopaedic OPD

FOLLOW UP

On follow-up, she continued to take analgesics occasionally for six months.

With regular physiotherapy since the time of diagnosis she has improved considerably and is now able to perform daily activities like walking and climbing stairs easily.

II. Discussion

Pubic diastasis is defined as the separation of the pubic bones by more than 10 mm. Pubic symphysis is a synovial joint separated by a fibrocartilaginous disc and supported ligaments, which strengthen the joint. Hormone Relaxin plays a vital role in the maternal accommodation of pregnancy, which includes pelvic joint relaxation. This condition usually presents as something giving way in the region of the symphysis pubis, sometimes with an audible crack at the time of delivery. Patient complaints of unbearable pain on moving from side-to-side and on performing any weight-bearing in the immediate postpartum period. Radiography, ultrasound, and magnetic resonance imaging are the diagnostic modalities that aid confirmation of diagnosis. Complications such as retropubic hematoma formation, pubic osteomyelitis, urinary and fecal incontinence have been reported. Conservative management using analgesics and physiotherapy offers resolution of symptoms in majority cases and is usually associated with complete recovery. Operative interventions like open reduction and internal fixation, external fixation might be required in cases with symphyseal separation of more than 3 cm, traumatic rupture, failure of conservative therapy, or persistence or recurrence of symptoms after puerperium. Management of each case has to be individualized.

III. Conclusion

PSD is a rare complication of labour. An abnormally long or short duration of labour, shoulder dystocia, Mc Roberts manoeuvre, and epidural anaesthesia have been found to be associated with this complication as per the literature reviewed. However patients with no above risk factors but with symptoms suggestive of pubic diastasis should raise a suspicion about this condition. Early suspicion, diagnosis and management can help the patient in long run and reduce morbidity associated with it. This case report serves to make obstetricians and orthopedic surgeons consider this differential in a relatively low-risk population.

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