CASE REPORT

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Spontaneous Postpartum Pubic Symphysis Diastasis - An Unexplored Territory

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ABSTRACT

Pubic symphysis diastasis (PSD) is a rare obstetric complication, which we encountered in a post-partum multipara following vaginal delivery of a big baby weighing 4.25 kg. Diagnosed on the basis of suprapubic pain and X-ray pelvis and managed conservatively with pelvic binder, solicits all the Obstetrician to always keep the possibility of PSD in mind when encountered with pelvic pain after delivery of large babies.

Key-Words: *Diastasis, pain postpartum, symphysis Pubis*

INTRODUCTION

Pubic symphysis is relatively immobile non-synovial cartilaginous joint, which holds two hip bones together anteriorly with two cartilages at the end of the joints with rotation of 3 degree and width of 2-6 mm. In pregnancy, due to the effect of progesterone and relaxin hormone, a mild degree of separation of the joint is physiologically noted with minimal 3 to 5 mm widening antenatally to subserve the purpose of easing the delivery of baby during the process of child birth.[1]

PSD also known as symphysis rupture, is a rare complication during child birth having incidence of 1:300 to 1:30000.[2] This may occur in Marfan's syndrome or in condition where there is disturbance in calcium and vitamin D regulation. It has been more commonly seen in multiparous woman and woman receiving epidural anaesthesia in labour. The pathophysiology of PSD is noted, mainly to be due to trauma to the pelvic connective tissue by the force exerted in the birth canal during delivery process. This pressure weakens the ligaments of the symphysis thus resulting in ligament tears. Thereby, widening of the pubic symphysis joint causes pelvic pain, postpartum pelvic instability and pelvic insufficiency.

Corrective treatment in the simplest form is pelvic binder which when applied as done in our case gave a satisfactory result in due course of time, which is presented herewith, the incidence that happened being 2078.

CASE

A 34 years G5 with previous two normal vaginal deliveries at 39 weeks period of gestation (POG), a booked case was admitted in the delivery room with complaints of labor pain for one day. Previously, she had uneventful obstetric history with first baby born 15 years back weighing 3.5 kg and second baby born 10 years back weighing 3.6 kg. She did not have any complications during and after those deliveries.

A known diabetic for six years, was under medical nutrition therapy. At the time of admission, uterus was term size and there were no contractions. Baby was in cephalic presentation with regular fetal heart rate. On pelvic examination, cervical Os was parous, soft in consistency, posterior in location, uneffaced and vertex was at-2 station. Bishop score was calculated to be 3. She was induced with Cerviprime (Dinoprostone gel 0.5 gm) two doses, kept intracervically six hours apart. After four hours of last dose of medication, she went into active phase of labour and was augmented with escalating doses of syntocin taking note of number and strength of uterine contractions. After 3 hours of augmentation, she entered second stage of labor. At the time of delivery, shoulder dystocia was anticipated because of the big baby

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size and so she was kept in Mc Robert's position to facilitate the delivery without shoulder dystocia. A baby boy with good Apgar score was born and weighed 4.25 kg. Total duration of first stage of labor was seven hours and second stage of labor was one hour.

In the immediate postpartum period, while being transferred from delivery room to postnatal ward severe pelvic pain was complained. The pain was localised in suprapubic area and increased during squatting position or any movement refraining her from flexing the thigh. Waddling gait was noted.

On examination of the suprapubic region, gap was noted in between the two pubic symphysis bones with overlying swelling. Audible click was heard during examination. But positive point tenderness Trendelenbur test, Patrick's Fabere test, Pelvic compression test and lumbar tenderness all were negative. X-ray pelvis [(AP view) (Figure 1)] showed separation of pubic symphysis of 20 mm. A diagnosis of PSD secondary to child birth was made.

Orthopaedic consultation made their advice followed to reduce the pain and swelling which constituted conservative management such as bed rest, ice compression, analgesics, pelvic binder application at the level of greater trochanter and arm crutches for mobilisation. On improved, she was discharged on 4th postpartum day.

At follow up six weeks later, she still complained slight existence of some difficulty in carrying out her day-to-day activities. On examination, mild generalized atrophy of lower limb muscles was noted. X-ray pelvis [(AP) (Figure 2)] showed reduction in separation of pubic symphysis joint to 1.6 cm. Physiotherapy for pelvic stabilization was advised. On follow up four months later, she was relatively symptom free confirming Xray decrease in the afore gap to 5 mm.

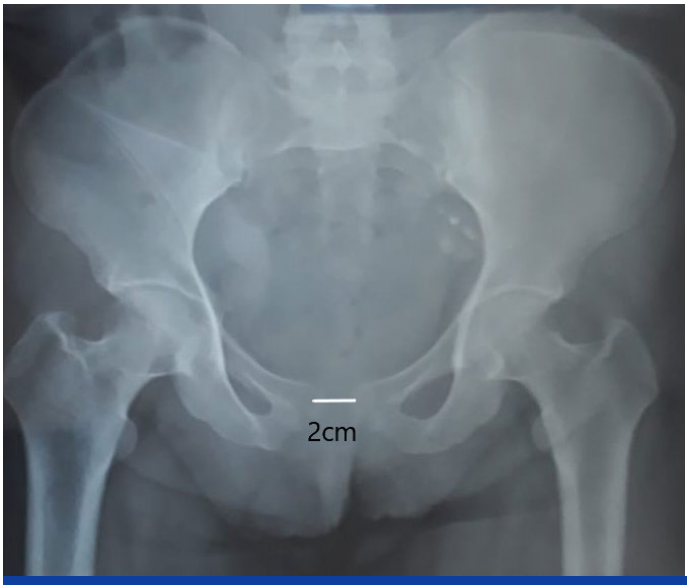

Fig 1: X-ray, 24-hour post-delivery showing pubic symphysis separation of 2cm

Fig 2: X-ray pelvis six weeks puerperium showing symphysis pubic separation of 1.6 cm.

DISCUSSION

Separation of symphysis pubis bones by more than 1 cm labelled as PSD is demonstrable by conventional X-ray imaging. In our case, fetal macrosomia, Mc Robert's position with the anticipation of shoulder dystocia with keeping mother in prolonged hyperabduction of thigh during delivery might perhaps have led to PSD, as other plausible causes such as precipitous labour was ruled out.[3,4]

This case tells educates, that the severity of symptoms is not always related to the degree of separation of the symphysis joint. Conservative management is the gold standard, since separation up to 9.5 cm, have been perfected, joint stability additionally being maintained by declining hormonal effect of progesterone and relaxin, further postnatally.[4]

Operative intervention is only advised to stabilize the pelvic girdle if distension is of more than 2.5 cm or there is sacroiliac joint dislocation.[5] In the follow up, X-ray pelvis, generally done at six weeks, helps in guiding further management.

CONCLUSION

Pubic symphysis diastasis though rare should always be kept as differential for suprapubic pain especially, if the delivery was difficult.

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