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Original Research Paper

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A RARE CASE REPORT OF POSTPARTUM TRAUMATIC PELVIC RING AND URETHRAL INJURY FOLLOWING CHILD BIRTH.

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ABSTRACT Postpartum pubic symphysis diastasis (PPSD) is defined as separation of the pubic symphysis without a fracture post delivery. Although not a common complication in peripartum period, it can lead to various problems such as severe pain, difficulty in ambulation post-delivery and urinary dysfunction. As per literature, incidence of PPSD has been reported to be 1/30,000 to 1/300 pregnancies with varying degrees1. We present a case of a 24-year-old Primigravidae, who presented in our Emergency suite with traumatic pelvic ring injury , perineal and urethral injury following normal vaginal childbirth . With help of Multidisciplinary team and informed consent and counselling, patient was managed with surgical vaginal exploration with perineal and urethral repair. Postpartum pubic symphysis diastasis (PPSD) was managed conservatively and followed up. Patient was discharged on day 10 post operatively. **Discussion:** We should always consider early detection, diagnosis, and treatment including ultrasound and a standard AP pelvis radiograph, in cases of sustained or out of proportion pelvic pain following childbirth. Team-centered multidisciplinary patient care including physical medicine and rehabilitation should be utilized to optimize outcomes of the patient post-delivery .Limited data exists about universal adoption of treatment options. We hope our study helps to add to the literature of post partum pelvic ring injury records.

KEYWORDS : Pubic Diastasis, Postpartum, Pelvic Ring Injury

INTRODUCTION

Postpartum pubic symphysis diastasis (PPSD) refers to the separation of pubic symphysis after delivery. It is typically diagnosed based on clinical symptoms and radiologic fndings As per literature, incidence of PPSD has been reported to be 1/30,000 to 1/300 pregnancies with varying degrees.[1]

24-year-old Primipara Indian woman was referred to our tertiary care higher centre post delivery 4 hours with traumatic Postpartum haemorhage. As per the history and records patient was 40. 2 weeks gestation and had undergone spontaneous rupture of membrane. Labour was augmented with Pitocin infusion, and she progressed to full cervical dilatation and delivered healthy male child of 3.8 kg. Postpartum patient developed traumatic Postpartum haemorrhage and was referred to our suite. With proper informed consent and blood investigations, multidisciplinary approach patient was managed with vaginal exploration with urethral and perineal repair (Fig. 1). After stabilising the patient, orthopaedic consultation was initiated to evaluate for severe back and pelvic girdle pain and difficulty in ambulating. Medical history was significant for pregnancy-associated carpal tunnel syndrome and repair of a deviated septum secondary to a motor vehicle accident 11 years earlier. On physical examination, tenderness was noted over the anterior pubis. An anteroposterior (AP) pelvic radiograph demonstrated a 30.7-mm separation of the pubic symphysis suggestive of symphysis pubis diastasis (Fig. 2). She was placed in a pelvic binder, allowed to ambulate but non–weight-bearing on the right, and planned to be re-evaluated with pelvic radiograph. Patient improved symptomatically by conservative management and was discharged on day 10 post admission.

(Fig. 1 Urethral And Perineal Injury With Foleys Insitu)

(Fig. 2 Anteroposterior Pelvic Radiograph Demonstrated A 30.7-mm Diastasis Of The Pubic Symphysis).

DISCUSSION

Widening of the cartilaginous joint during pregnancy before childbirth is physiological and helps in expanding the birth canal for successful delivery of the baby. 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[2, 3]. Various risk factors associated with postpartum pubic symphysis diastasis include primigravida women, multiple gestations, and prolonged active labor, Instrumental Forceps deliveries, deliveries of newborns weighing over 4000 gm, and infant macrosomia, epidural analgesia and shoulder dystocia or McRoberts maneuver .

The postpartum presentation is most common in PPSD, although during pregnancy few cases are reported. Administration of spinal epidural anaesthesia during the birthing process can mask the symptoms sometimes. Patient with severe pain in the suprapubic region, with or without pain localized over the sacroiliac joints with difficulty in walking should always be evaluated. Patients also presents with difficulty with both active and passive straight leg raise test and difficulty in changes in bed positioning. On physical examination, patients will often present in discomfort secondary to pain, pain with palpation or attempted

manipulation of the pelvic girdle, and pain with attempted weight bearing or ambulation. Ultrasound scan can be diagnostic and used for screening in suspected cases, but a standard AP pelvis radiograph is the must. Pubic symphysis diastasis greater than 1 cm indicates a pathologic process of the pelvic girdle along with bilateral sacral iliac joints evaluation on plain radiography for gapping or gross separation should be done. For further detailed evaluation , CT with a three-dimensional reconstruction should be considered. Non-contrast-enhanced magnetic resonance imaging to assess for surrounding soft tissue injury can be considered for wider gap more than 4 cm [4].

Treatment options include non-operative treatment with application of pelvic binder coupled with physical therapy and immediate weight bearing, non-weight bearing with bedrest, closed reduction with application of binder, application of anterior external fixator with or without sacroiliac screw fixation, and anterior internal fixation with plate and screws. In majority of the cases, conservative management is recommended and yields good functional outcomes. Usually Prognosis is very good for the majority of patients who experience postpartum pubic symphysis diastasis, and in most cases, full recovery without persistent pain is the expectation for patients [5]

Educating women about PPSD although a rare event, but pubic lesions are frequent is important . Women with un resolved pelvic pain after delivery should be educated and counselled. Our report validates that PPSD following vaginal delivery can be managed satisfactorily without any operative intervention or prolonged bed rest. Awareness among medical professionals about the condition as this condition itself has increased incidence of recurrence in subsequent pregnancies is must.

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