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POSTPARTUM PUBIC DIASTASIS: A RARE CASE REPORT

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Abstract
This case report aims to document the complication of unattended normal vaginal delivery and management of postpartum pubic diastasis in a 20-year-old primigravida following an outside peripheral hospital delivery. Pubic diastasis, although rare, can lead to significant morbidity if not promptly identified and managed. The patient presented with a paraurethral tear and significant pubic diastasis, which were successfully managed through surgical repair of defect and conservative measures. Thorough clinical examination, laboratory investigations, and radiographic imaging were employed to assess the extent of the injury and guide management. The patient responded well to conservative management, with symptomatic improvement and resolution of pubic diastasis observed upon discharge. This case underscores the importance of institutional deliveries in preventing maternal morbidity and highlights the effectiveness of a multidisciplinary approach in managing complex obstetric complications. Comprehensive reporting of such cases is essential for improving maternal healthcare practices and outcomes.

Introduction:
Postpartum pubic diastasis, although relatively uncommon, represents a significant obstetric complication characterized by separation of the pubic symphysis following childbirth [1]. While the incidence of this condition is low, ranging from 1 in 300 to 1 in 30,000 deliveries, its consequences can be severe, leading to chronic pain, impaired mobility, and long-term morbidity if not promptly recognized and managed [2]. The etiology of postpartum pubic diastasis is multifactorial, often associated with factors such as prolonged labor, macrosomia, instrumental deliveries excessive traction during delivery [3] and idiopathic causes may include.
Despite the increasing emphasis on institutional deliveries and skilled birth attendance, instances of postpartum pubic diastasis may still occur, particularly in settings where access to healthcare facilities is limited or when deliveries are assisted by untrained birth attendants [4-6]. These cases underscore the importance of comprehensive obstetric care and the need for vigilant monitoring during labor and delivery to prevent such complications.
In this context, we present a case of postpartum pubic diastasis in a 20-year-old primigravida following a delivery at an outside peripheral hospital. The case highlights the challenges associated with managing this condition and emphasizes the importance of timely diagnosis and appropriate management to optimize maternal outcomes.
As the focus shifts towards preventing maternal morbidity in the era of increasing institutional deliveries, this case report presents a unique instance of postpartum pubic diastasis following a delivery outside a peripheral hospital.

Case Report:

Patient History:
A 20-year-old primigravida, who attended antenatal care, received immunizations, and underwent a normal vaginal delivery at an outside peripheral hospital, presented to our facility with a referral letter indicating a third-degree paraurethral tear. The patient reported that she has been on more than 12hrs labour pains and delivery was conducted by an untrained traditional birth assistant . Despite the delivery of a healthy male child weighing 3 kg, postpartum examination revealed a paraurethral defect extending deep into the pubic bone.

Clinical Examination:
Upon arrival, the patient was clinically stable with no significant past medical or surgical history. Examination revealed a right paraurethral defect measuring 3 * 3 cm, extending deep to the pubic bone, accompanied by a 3 cm midline tear (Figure 1.). Digital examination confirmed separation of the pubic symphysis, exposing supporting connective tissue. As figure 3 showing ,there was suspected injury to bulbospongiosus muscle and loss of normal anatomy of external genital .Per speculum examination revealed no cervical tear, while per vaginal examination showed an involuting uterus. Per rectal examination was unremarkable.

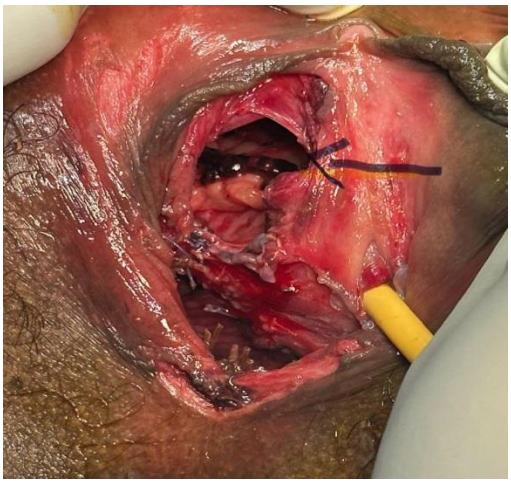

Figure 1) digital examination confirms the separation of pubic symphysis and exposure of separation of connective tissue

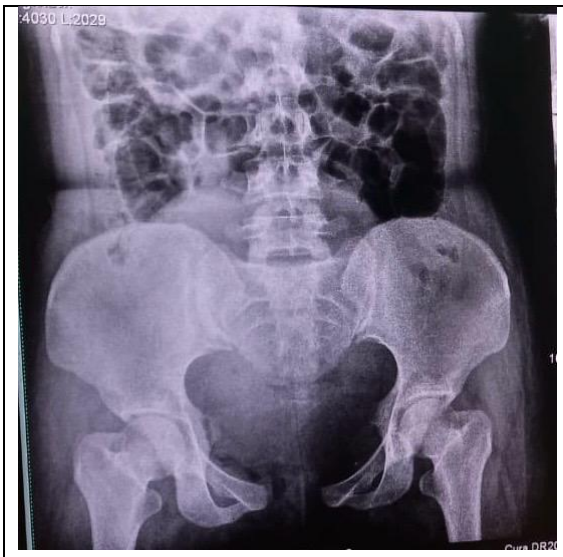

Figure 2) radiography suggestive of pubic diastasis

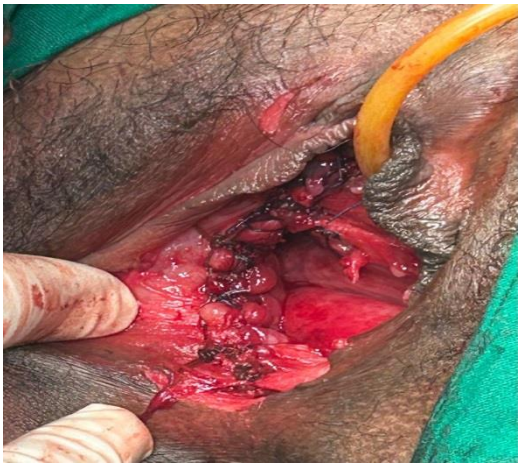

Figure 3): Restoration of anatomy of external genital

Diagnostic Findings:
Laboratory investigations indicated a hemoglobin level of 7g%, prompting blood transfusion, while the total white blood cell count and platelets count was within normal limits. Pelvic ultrasonography yielded normal findings, while radiography suggested pubic diastasis.

Management:
Following anemia correction , patient was prepared and under sedation paraurethral and midline defect were repaired **.**
Following specialist orthopedic opinion, closed reduction under short general anesthesia was performed, followed by conservative management with a pelvic binder. The patient was immobilized for six weeks before discharge and advised to undergo regular physiotherapy.

Outcome:
Upon discharge, the patient remained asymptomatic, with subsequent radiography confirming pubic diastasis without symptoms and normal gait.

Discussion:
Pubic diastasis, though uncommon, can pose substantial risks to maternal health, particularly in cases of unattended deliveries. This case report documents a unique instance of postpartum pubic diastasis in Maharashtra, India, over the past decade,

emphasizing the importance of timely recognition and management of such complications [7-9].

The management of pubic diastasis typically involves conservative or surgical approaches. In this case, patient has lost normal anatomy of external genital , immediately on examination intraurethral foleys insertion done and bladder injury has been ruled out through per speculum examination and ultrasonography. No active bleeding from retropubic space has been confirmed. Then the defect has been repaired under short GA by the skilled expert surgeon. The anatomy of external genital has been restored by expert surgeon (FIG 4).By the specialist orthopedician closed reduction under short general anesthesia was successfully performed, followed by conservative treatment using a pelvic binder. This aligns with existing literature, which suggests the effectiveness of closed reduction as an initial intervention [10]. However, it is noted that some studies advocate for open reduction in more severe cases.

Following reduction, the patient was immobilized for six weeks and advised to undergo regular physiotherapy. This approach is supported by previous research, highlighting the integral role of physiotherapy in the rehabilitation process, aiding in pelvic muscle strengthening and functional restoration [5,11].

This case underscores the importance of institutional deliveries and the necessity of reporting such complications to improve maternal outcomes and prevent obstetric morbidity. Timely recognition and appropriate management of pubic diastasis are crucial to prevent long-term complications and ensure optimal recovery for the mother.

In conclusion, this case report provides valuable insights into the management of postpartum pubic diastasis, emphasizing the restoration of normal anatomy of external genital and efficacy of closed reduction followed by conservative treatment. Further research and reporting of such cases are essential to refine treatment protocols and enhance maternal healthcare delivery.

Conclusion:

This case highlights the occurrence of postpartum pubic diastasis in a primigravida following a delivery outside a healthcare facility. Prompt diagnosis and appropriate management, including restoration of normal anatomy of external genital, closed reduction of pubic diastasis and immobilization, resulted in a favourable outcome. Such cases underscore the importance of skilled birth attendance and comprehensive obstetric care to prevent and manage obstetric complications effectively.

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