



Pubic symphyseal diastasis during normal vaginal delivery

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Introduction

In late pregnancy, the increased laxity of pelvic ligamentous structures caused by relaxin predisposes to traumatic damage to the pelvic joints with the head engaged in the pelvic inlet antepartum or intrapartum. Some times this combined ligamentous relaxation and pelvic strain becomes so pronounced that one occasionally sees permanent diastasis of public symphysis, with persistent symptoms and morbidity, caused by instability of symphysis and the sacroiliac articulation ¹.

Mrs. J, a 26 year old 3rd gravida with previous two full term normal deliveries was admitted in labor on 27th February 2003. She delivered a 3.2 kg, male child after a normal vaginal delivery.

On the 3rd postpartum day, she developed severe pain in the suprapubic region and was unable to stand, walk or sit properly because of the pain. General examination revealed nothing abnormal. On local examination acute tenderness was present in the region of the pubic symphysis. She had no evidence of sepsis or urinary retention. A clinical diagnosis of pubic bone diastasis was considered because of severe tenderness at pubic symphysis. Pelvic x-ray showed disruption of pubic symphysis by 1.7 cm (Figure 1). Orthopedic consultation confirmed the diagnosis.



Figure 1. Pelvic x-ray showing pubic bone separation by 1.7 cm.

Adhesive tape strapping and pelvic strapping with canvas belt were done. Indwelling catheter was inserted. The patient was put on analgesics and anti-inflammatory drugs. She was discharged on the 6th postpartum day and advised complete bed rest. X-ray at the time of discharge showed near normal pubic symphysis (Figure 2).

Follow up after 3 weeks showed decrease in pain at the suprapubic region. She was able to walk with support. Her

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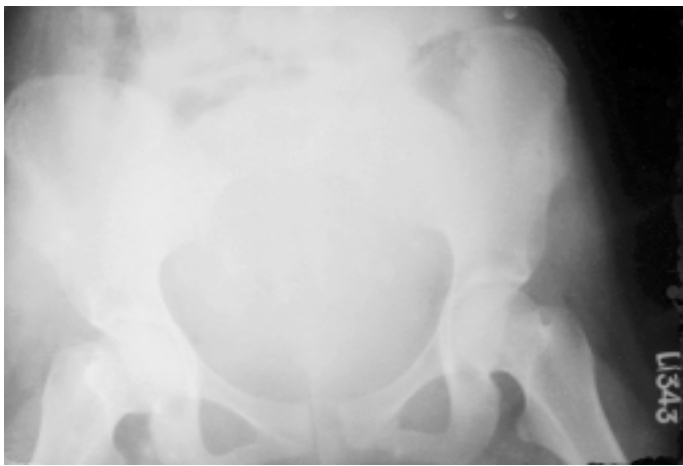


Figure 2. X-ray of the pelvis at discharge on 6th day.

catheter was removed. At the next follow up after one month she could walk comfortably without pain. She could do her routine household work.

Discussion

Anteriorly, the pelvic bones are joined together by symphysis pubis. This structure consists of fibrocartilage and superior and inferior pubic ligaments. The ligaments of pubic symphysis and sacroiliac joints loosen during pregnancy, probably secondary to hormone relaxin.

Marked widening of symphysis pubis occurs by 28-32 weeks gestation, when its width increases by 3 to 4 mm to 7.7 to 7.9 mm from a nonpregnant mean of 4.1mm in nulliparas and 4.6 mm in multiparas ². This change is particularly well observed in multipara. If a finger is inserted into the vagina of a pregnant woman and she is made to walk, the ends of the

pubic bones could be felt moving up and down with each step ³.

The symphysis pubis shows a widening upto 10 mm during pregnancy without any disability. There are various predisposing factors which may lead to disruption of pubic symphysis viz., multiparity, cephalopelvic disproportion, precipitate labor, difficult labor, difficult forceps delivery and preexisting pathology of pelvic bones ⁴.

Treatment of this condition is bed rest, strapping and analgesics. The condition may present in early or late postpartum period. Pubic symphyseal diastasis occurs asymptotically in patients and later presents with varying amounts of disability ranging from supra-pubic pain to inability to bear weight and inability to pass urine. The recovery period varies, but if the patient presents during early postpartum period the recovery is fast. In late postpartum period, recovery is delayed. In cases having continuous waddling gait and inability to do routine chores, plating of symphysis has a definite role ⁵.

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