

Traumatic Rupture of the Symphysis Pubis and Posterior Fracture Dislocation of the Femur Following Vaginal Delivery: A Case for Symphysiotomy.

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Abstract

Mrs. I. M. was a 23 years old primipara referred to UBTH with traumatic rupture of the symphysis pubis and posterior fracture dislocation of the left femoral head, after a delay in the second stage of labour that lasted 3 hours and a crude manoeuvre to deliver the fetus. The baby suffered severe birth asphyxia and convulsive seizures three days postpartum.

She had a closed reduction of the hip joint dislocation and traction. Recovery was satisfactory. Considering this outcome, a properly timed symphysiotomy would have been a better option to the traumatic rupture of the symphysis pubis, if personnel with the appropriate skills were available.

Key Words: *Symphysis Pubis; Rupture; Fracture; Symphysiotomy.* [Trop J Obstet Gynaecol. 2001. 18: 38-39]

Introduction

Rupture of the pubic symphysis is a very rare consequence of the process of parturition and it requires decidedly injudicious use of force in an obstetric manoeuvre to bring about such an outcome.

Case Report

Mrs. I. M. a 23 year-old Para 1⁺¹ woman was admitted on the 11th of June 1999, as an emergency three weeks after delivery, with pain in the left hip and waist; and inability to walk since the delivery. She had antenatal care at a private maternity home and was admitted in spontaneous labour at term. Labour lasted over 24 hours and was accompanied by a delay in the second stage.

Delivery was facilitated in the following manner: while she was in the dorsal position, an assistant was assigned to each lower limb, flexing the knee and hip joints and forcibly abducting the thigh. A third assistant then gave fundal pressure while the accoucheur was at the perineum to manipulate the baby at the outlet. Delivery was eventually achieved after about 3 hours in this position. She was delivered of a live female neonate who did not cry at birth. The baby was not weighed at birth, and was subsequently admitted in a private neonatal unit in town for generalised seizures three days later. The admission weight was 3.2 kg.

The history revealed that Mrs. I. M. walked to the labour room with no gait abnormality in this labour and did not receive any intramuscular injections during her labour and delivery. There were no immediate maternal complications in the 3rd stage of labour, except that she experienced a dull pain in the waist and around the left hip joint, which was severe enough to restrict movement, even in the supine position. She also had paraesthesia and numbness on the left lower limb. She was referred to the teaching hospital 3 weeks later with her baby who by then had been discharged from the private neonatal unit.

A general examination was unremarkable; she was 1.59m tall and weighed 55 kg. The essential findings were in the

abdomen and lower limbs. Her abdomen was full with marked tenderness over a widened pubic symphysis. There was no evidence of genital sepsis or urinary and or faecal incontinence. The left lower limb was externally rotated with a shortening of 2.5 cm and there was marked tenderness over the left hip joint.

The muscle power in the limb could not be tested because of exquisite tenderness, but there was no sensory loss. The right lower limb was essentially normal. A plain X-ray of the pelvis confirmed the diagnosis of symphyseal diastasis and posterior fracture dislocation of the left femur (Figure 1). The symphyseal space measured 18 mm. She was jointly managed with the Orthopaedic surgeons and physiotherapists. She had a close reduction of the hip joint and traction on the left femur. Her treatment was combined with thermotherapy, electrical stimulation and active exercises of the lower limbs. She made satisfactory recovery and walked out on discharge in December 1999.

Discussion

Spontaneous separation of the pubic symphysis is a recognised but rather underreported complication of pregnancy¹⁻³. However, fracture dislocation of the femoral joint following vaginal delivery is rare. This may be attributed to the remarkable improvements in intrapartum care. Albeit, unlike what obtains in modern delivery rooms, Mrs. I. M. had an intervention in the second stage of labour by fundal pressure with forceful abduction of both flexed thighs while being restrained in the dorsal position. This manipulation resulted in fracture dislocation of the femur and rupture of the symphysis pubis (confirmed by X-rays).

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Figure 1

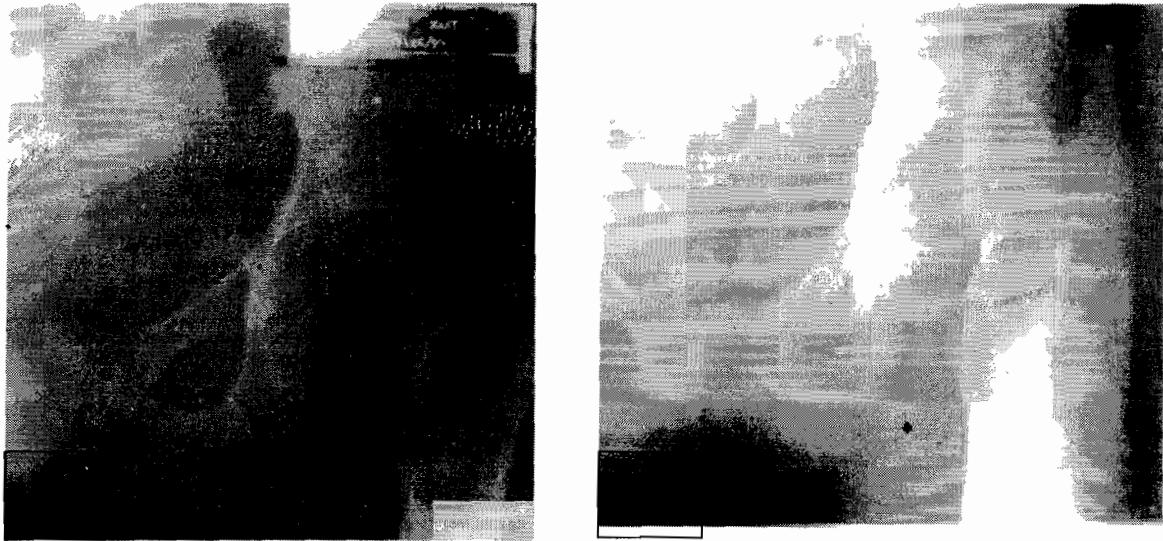


Figure 1a & 1b- Plain X-ray of Mrs I.M. 4 weeks after delivery showing posterior dislocation of the left femur and symphyseal diastasis

While this undesirable maternal morbidity could be described as an avoidable obstetric disaster, it calls for a review of the management options in delayed second stage of labour in developing countries. With the relative inaccessibility and high cost of caesarean section, this delivery option may not always be appropriate and or feasible in most developing countries. In addition, caesarean section is often associated with significant morbidity and mortality^{4,5}, resulting in aversion for future operative delivery and avoidance of standard health care facilities in subsequent pregnancies. There may also be reluctance on the part of private service providers in referring such patients to better-equipped tertiary centres. The alternative of a symphysiotomy appears more appealing and acceptable on this occasion, and the availability of a centre where such skills were obtainable may have prompted an early referral.

With adequate training of personnel on the technique of symphysiotomy, its potential complications could be minimised if not eliminated⁶⁻⁸. It can therefore be a safer alternative to spontaneous symphyseal separation and/or caesarean section in the third world.

References

1. Snow RE, Neubert AG. Peripartum pubic symphysis separation: a case series and review of the literature. *Obstet Gynecol Surv.* 1997; 52: 438-443
2. Spaeth DG. Observatory clues to aid in the diagnosing of diastasis symphysis pubis: an underreported complication of parturition. *J Am Osteopath Assoc.* 1997; 97: 152-155.
3. Gherman RB, Ouzounian JG, Incerpi MH, Goodwin TM. Symphyseal separation and transient femoral neuropathy associated with the McRoberts' maneuver. *Am J Obstet Gynecol.* 1998; 178: 609-610.
4. Mola GD. Symphysiotomy or caesarean section after failed trial of assisted delivery. *Papua N Guinea Med J.* 1995; 38: 172-177.
5. van Roosmalen J. Safe motherhood: cesarean section or symphysiotomy? *Am J Obstet Gynecol.* 1990; 163: 1-4
6. Bergstrom S, Lublin H, Molin A. Value of symphysiotomy in obstructed labour management and follow-up of 31cases. *Gynecol Obstet Invest.* 1994; 38: 31-35.
7. Pust RE, Hirschler RA, Lennox CE. Emergency symphysiotomy for the trapped head in breech delivery: indications, limitations and method. *Trop Doct.* 1992; 22: 71-75.
8. Ersdal HL, Bergstrom S. Symphysiotomy: a thought-provoking example of an appropriate technique in the Third World. *Tidsskrift for Den Norske Laegeforening.* 1997. 117: 1301-1303.