CASE REPORT

Separation of the symphysis pubis in a spontaneous vaginal labour

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Introduction

The symphysis pubis separation is frequently misdiagnosed because of confusing pain due to labour. It usually occurs at pregnant who has lack of pelvic flexibility. Separations that do not exceed 10 mm are called to be physiologic and spontaneously resolves within 6 months. Severe separations must be treated by surgical manner.

Case report

A 29-year-old multigravida woman (gravida VIII, para VII) was consulted to our clinic after spontaneous vaginal labour and sudden onset of severe pelvic pain and inability to stand or walk. On her physical examination there was pain by pelvic compression, local tenderness and gap on symphysis. She had no history of instrumentation or prolonged labour and she has delivered a newborn baby weighing 2500 g. On her radiological examination pelvis anteroposterior view revealed 31 mm separation of symphysis pubis (Fig. 1). There were no other bone pathology. External vaginal examination was normal. The patient was anaemic and urine was normal. The separation was reduced by external pelvic fixation at third day after delivery (Fig. 2). Patient was mobilized after second day of the operation with full weight bearing. She was pain free and able to walk with crutches. She was followed at 15-day intervals and after the decision of union at 50th day of operation the fixator was removed. At the end of the third month patient was pain free, can walk without waddling and the symphysis remained in reduced position (Fig. 3).

Discussion

Symphysis pubis is an amphiarthrotic joint which is reinforced by four ligaments. The strongest of them is anterior pubic ligament. Probably the excessive hormonal activity effects pelvic ligaments for relaxation. These hormones are relaxin and progesterone. The reported maximum physiological diastasis of symphysis at the literture does not exceed 10 mm. This physiological diastasis resolves spontaneously within 6 months of delivery. Kothe et al. states that rupture of the symphysis pubis in spontaneous labour is caused by marked intensity of the uterine contractions plus...
marked rapidity of labour. Pregnants with lack of pelvic flexibility in the absence of other predisposing factors, are at increased risk for development of rupture. Furthermore multiparity, difficult forceps delivery, precipitous labour, congenital anomalies, rickets and tuberculosis may implicate symphysis pubis separation.

The reported incidence at literature varied considerably from 1:521 to 5000. Barnes found pelvic relaxation during pregnancy in 50—60% of his cases. Heyman and Lundqvist and Abramson et al. found an increase in the width of the symphysis pubis in almost all pregnancies.

Almost always severe pain according to the separation that is radiating to thigh and leg prevents the patient to stand or walk. Separation can be palpated by external physical examination. The diagnosis can be easily done by clinical and radiological examination. With a separation of more than 4 cm must be checked for sacroiliac joint pathology. Below 2.5 cm of separations must be treated conservatively by restrictive pelvic binder and absolute bed rest on lateral decubitus position. Brehm and Weirauk classified their cases into four groups according to the degree of separation in centimeters. They advocate conservative treatment with bed rest and binders for 3—4 weeks in separations greater than 2 cm. Surgical apposition is recommended if conservative methods fail.

Surgical intervention is indicated at patients whose closed reduction is failed and patients who has more than 2.5 cm diastasis. By internal or external fixation enough and stable reduction can be easily done. Complete recovery can be usually achieved at the end of 6 or 8 weeks. Although symptoms may persist after 6 months in some patients, long-term results are successful. Some complications are nonunion, osteitis pubis, hematoma, vaginal laceration, urethral injuries and infections.

In conclusion rapid descent of fetal head during labour may separate symphysis pubis at a pregnant who lacks pelvic flexibility. The diagnosis and treatment can be easily done. Clinical suspicion is always a guide for orthopaedic surgeons whom usually consults such cases. In the situation of severe pelvic pain and serious symphysis separation, pelvic external fixation is a good choice for reduction and maintenance of the width of symphysis at physiological ranges even on mobilization just after the operation.

References

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