

SYMPHYSIS PUBLIS DIASTASIS RELATED TO PREGNANCY - REVIEW OVER TEN YEARS

SOUNDARA RAGHAVAN ● S UMA DEVI

P REDDI RANI ● P RAJARAM

SUMMARY

All the patients with pubic symphysis separation admitted to the Department of Obstetrics and Gynaecology, JIPMER Hospital, Pondicherry for ten years were studied. Though difficult delivery was the common cause, non-obstetric trauma was also encountered. Diagnosis presented no problem, but the ensuing morbidity was significant. Though antenatal care is expected to avoid the occurrence of this condition, it can happen following normal delivery in the hospital.

INTRODUCTION

The occurrence of separation of symphysis pubis is quite uncommon. We had six cases of symphysis pubis separation between February 1988 and February 1989 in our institute. This unusual frequency prompted us to search the hospital records for the previous nine years and to our surprise, we could find only two other cases. We wish to present the summary of our cases and briefly review the literature.

MATERIALS AND METHODS

The clinical details of the cases are given in

*Dept. of Obstet. & Gynec. JIPMER, Pondicherry,
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the Table I.

The age of the patients ranged from 20 to 35 years. Out of 8 patients, only one was a primipara. All the rest were multiparae / multigravidae. Two patients had diastasis of pubic symphysis due to non-obstetric trauma. However, they are described here since the patients were pregnant and were managed by us with the help of the orthopedicians.

Six patients suffered from diastasis of pubic symphysis as a direct result of obstetric trauma. Three of these followed instrumental delivery and three were after spontaneous vaginal delivery. Five of these patients came to our hospital after delivery outside. One patient who had a spontaneous delivery in our hospital sustained

TABLE I

No.	Year	Age	Parity/ Gravidity	History	Findings	Treatment	Hospital stay
1	1981	35	3	Triplet delivered outside Manual removal PPH	Tenderness, gap	Transfusionsling Anti-infl. drugs	9 days
2	1982	28	2/3	8 mA Fall from 6 feet	Tenderness, gap 30 wks preg. X-ray 2 cm gap	Strapping Anti- infl. drugs.	14 days
3	1988	31	5/1	Forceps delivery 3 prev. forceps	Tenderness, gap X-ray 2cm gap	Antibiotics traction Anti- infl. drugs.	10 days
4.	1988	23	2	Forceps delivery Bleeding Incontinence Cervix torn	Tenderness, gap X-ray +ve Inconti- Urethra torn	Blood Antibio- tics CBD Anti- infl. drugs	37 days Incontinence Normal delivery later.
5.	1988	20	1	Difficult forceps Baby died Incontinence	Tenderness, gap Urethral injury	Sling CBD Anti-infl. drugs	51 days Incontinence +
6.	1988	25	2	SVD home PPH Inability to walk	Tenderness, gap X-ray 2cms gap	Bed rest Anti- infl. drugs	10 days
7.	1989	21	2/3	Ref. as CPD SVD soon after admission	Tenderness, gap X-ray 3 cms gap	Traction Anti- infl. drugs	16 days
8.	1989	22	2/3	Wall collapse	Aborted Tenderness, gap injuries bladder	Rest Bl. repair	31 days

this condition.

The symptomatology included - inability to walk, pain in the pubic region following delivery. There was urinary incontinence in three patients due to associated injury to urethra or urinary bladder.

All the patients exhibited tenderness over pubic symphysis. A gap between the pubic bones could also be palpated. X-ray of pelvis confirmed the presence of a gap of 1-4 cms in all patients.

All the patients were treated with rest, anti-inflammatory drugs, pelvic strapping or sling, antibiotics where necessary and general/local measures as indicated.

DISCUSSION

Symphysis pubis is an amphiarthrodial, non-synovial joint at the confluence of the two pubic bones. It is stabilised by four ligaments (superior, inferior, anterior and posterior). These ligaments, together, neutralise tensile stresses and shear. There is a normal mobility of 2-3 mm in pubic symphysis which may slightly increase in pregnancy due to progesterone or relaxin. Delivery always causes some damage of the joint, the extent of which may depend on parity of the patient, the status of the joint, whether the delivery is spontaneous or instrumental, duration of labour, presence of disproportion etc. (Gamble et al, 1986). The damage is in the form of tear of ligaments, fibrocollagenous tissue etc. Forceful abduction in positioning the patient may also be a cause (Callahan, 1953). If the separation is more than 1 cm, pubic instability results and if it is more than 2.5 cm, sacroiliac strain is signified.

The association of symptoms and extent of separation do not correlate (Schwartz et al, 1985). Sometimes, widely separated joint may produce no symptoms. It is possible that some of these patients go unnoticed. On the contrary, symptoms may occur with mild separation. Pain, inability to walk, tenderness over pubic symphysis, sacroiliac pain are the common features. A

gap may be palpable over the area. X-ray is rarely needed to confirm the diagnosis.

Spontaneous separation of the joint during pregnancy is known (Reis et al, 1982). More often, it is due to traumatic delivery. Rapid delivery, instrumentation, particularly if difficult in a multigravida can cause diastasis to occur. The possibility of an already pathologically softened joint, has been proposed (Callahan, 1953).

Bed rest, analgesics, anti-inflammatory agents, pelvic immobilisation, special belts have been the mainstay of treatment. Some people use pelvic sling or spica. Recently Schwartz et al (1985) have claimed excellent results by injecting hydrocortisone, chymotrypsin and 1% lignocaine into the symphysis at about 2 cms depth. This is supposed to dramatically relieve symptoms and reduce the hospital stay. Associated problems like urinary tract injuries require appropriate management (Callahan, 1953).

CONCLUSIONS

One of the uncommonly occurring problems in obstetric practice is symphysis pubis diastasis. With improving quality of maternal care, its incidence will be even further reduced. Even though difficult instrumental delivery is more likely to be the cause, even spontaneous vaginal delivery in the hospital can cause this condition. Non-obstetric aetiology should also be kept in mind. Treatment in the form of rest, analgesics with or without immobilisation usually suffices, but intralesional steroid, local anesthetic and chymotrypsin may be worth trying to relieve symptoms and reduce hospital stay.

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