

LARGE VESICAL CALCULUS—OBSTRUCTING LABOUR

(A Case Report with Review of Literature)

by

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Introduction

The incidence of urinary calculi is low in females, the male-female ratio being 50:1 (Aird, 1957) and it is still lower in association with pregnancy (Jacob and Bhargava, 1971). Obstructed labour due to vesical calculus is seen rarely. This is the only case found in our hospital in 9,980 deliveries from January 1966 to July 1978. Seetha *et al* (1967) reported a case of vesical calculus complicating pregnancy at 18 weeks gestation with retention of urine.

In this patient vaginal cystotomy was done followed subsequently by a normal vaginal delivery at term. Jacob and Bhargava (1971) reported a case of vesical calculus obstructing labour and in their patient the calculus could be displaced above the presenting part under general anaesthesia by putting the patient in high trandlenberg position, followed immediately by forceps delivery. Panigrahi (1973) reported a case where caesarian section was done for obstructed labour due to a vesical calculus measuring 8.5×6.5 cms followed by extraperitoneal suprapubic cyystotomy. Although the foetus was dead, caesarian section was done to avoid

damage to the bladder during vaginal delivery. Joshi and Mohile (1978) reported a case of obstructed labour due to a large vesical calculus measuring 7.5×6.5 cms, weighing 200 gms. where LSCS was done followed by suprapubic cystotomy. A case of obstructed labour due to a large vesical calculus where caesarean section had to be done to avoid further trauma to the already bruised, edematous and infected vesical tissues is reported.

CASE REPORT

A 32 year old primigravida was admitted in JIPMER Hospital, on 19th July, 1978, with a history of 9 months amenorrhoea and labour pains since 2 days. She had incontinence of urine for the last 2 months. She had been married for 14 years. There was no history of being treated for infertility.

On examination, she was anaemic, the face was puffy, pedal edema was present. Pulse rate was 90/mt. and temperature was normal. B.P. was 170/100 mmhg. Systemic examination did not reveal anything in particular.

Abdominal examination showed a uterus 36 weeks gestation, with vertex presentation, not engaged and the position was LOA., uterine contractions were moderate and F.H.S. was 152/mt. Bladder was catheterized and 5 ml. of turbid blood stained urine was drained. The vulval skin was macerated.

On vaginal examination: A hard mass about 7×5 cms was felt impacted into the anterior vaginal wall in front of the foetal head and behind the symphysis pubis. (Fig. 1). The vaginal

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mucosa over this mass was stretched, thinned out and was peeling off.

On speculum examination, a stone impacted into the anterior vaginal wall was visualised. Cervix was fully effaced and 4 cms dilated, head was in LOA position, above the level of the ischial spines and membranes were absent. The calculus measuring 7 x 5 cms with a granular surface was removed which resulted in a big vesical-vaginal fistula (Fig. 2). In view of the big V.V.F. decision was taken for LSCS and a healthy female baby was delivered.

Investigation

Hb. 8%. TIC 20,000/cmm with neutrophils 78%, lymphocytes 20% and eosinophiles 2%. Urine examination revealed RBCs and pus cells.

In the post-operative period, in-dwelling catheter was kept for 14 days and injection crystalline penicillin 10 lac units 6th hourly IM and injection streptomycin 1 gm IM daily were given for 2 days followed by injection streptopencillin 1 vial IM dail for 8 days. Post operative course otherwise was uneventful. Patient was discharged on 4th August, 1978, with advice to come for repair of vesico-vaginal fistula after 3 months.

Discussion

During pregnancy or otherwise a vesical calculus needs removal. Diagnosed during pregnancy, the removal is indicated to prevent recurrent urinary infection and obstruction to labour. Usually, it gets pushed down into the pelvic cavity and causes obstruction during labour (Panigrahi, 1973 and Joshi and Mohile, 1978). Unless the stone is encysted, it may be possible to dislodge it above the presenting part and thus allow vaginal delivery (Jacob and Bhargava, 1971).

In our case, the calculus was impacted between the foetal head and pubic symphysis and was forced into the vagina resulting in a big vesico-vaginal fistula. In our case, LSCS was done to avoid further trauma.

Summary

1. A case of a large vesical calculus causing obstructed labour has been reported.
2. The relevant literature has been reviewed.
3. The calculus was forced out into the vagina resulting in a vesico-vaginal fistula.
4. Rarity of occurrence of vesical calculus obstructing labour has been emphasised.

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See Figs. on Art Paper X