VAGINAL CALCULUS WITH RETENTION OF URINE

(A Case Report)

by

CHANDRA KIRAN,* M.D.

and

BRIGIT JOSEPH,** M.D.

So far about 19 cases of vaginal calculus have been reported (Dalal, 1962; Eton, 1956; and Stansfield, 1942). This is the 20th case of vaginal calculus. It is the first case in this hospital in more than 25 years.

Case Report

A Hindu woman, aged about 30 years was admitted to the hospital on 19th March, 1970. She had not passed urine for the last 2 days and had agonising pain for which she was brought to the hospital. Her bladder was found distended above the umbilicus.

She had first full term normal delivery and then an abortion at 7 months. She had a difficult forceps in a district hospital and developed vesico-vaginal fistula immediately afterwards. After 6 months she started having pain in abdomen and fever with chill and rigor. She also gave history of incontinence of urine for the last 10 months.

On examination her vulva was seen excoriated with normal external urethral meatus. Rubber and metal catheters could not be successfully passed, because of obstruction.

On vaginal examination there was a hard stone filling the vagina. X-ray examination confirmed the stone in vagina with no trace of calculus in bladder or urinary tract. It could not be removed without general anesthesia.

The stone measured 4.5 x 2.5 cm and was circular and tapering distally. It had a distinct stalk of attachment on its broader proximal end with depressions by its side. It had a granular soft texture.

Chemical analysis revealed the presence of calcium, sodium, phosphate, urate, borate and carbonate.

After removing the calculus a vesico-vaginal fistula was observed (1 cm x 0.5 cm) in front of anterior cervical lip. The anterior cervical lip was found circatrised. Patient had incontinence of urine through the hole.

Urine examination revealed the presence of pus-cells and albumin. Culture sensitivity report of urine showed sensitivity to chloramphenicol. Her haemoglobin was found to be 68% with 3 million RBC/cm. Her KT and VDRL were positive.

The patient was put on chloramphenicol and after stabilizing the urinary infection a course of pennidure LA was administered.

The vesico-vaginal-fistula was repaired by flap method and healed well. Atraumatic, chromic cat-gut, number 00, was used for suturing.

Discussion

A frequent finding is a calculus formed around a neglected ligature either in the bladder or the vagina. Traditional colpocleisis in repair of vesico-vaginal fistulas is also known to cause formation of calculi. Eton (1956) reported an ectopic ureter causing uretero-vaginal fistula and vaginal calculus. Brayne (1926) reported a peculiar case of vesico-vaginal fistula with dense fibrous tissue bands obstructing the vaginal canal and giving rise to

**Reader.*

***Professor and Head.*

Department of Obst. & Gynaecology, S.N. Medical College, Umaid Hospital, Jodhpur (Raj.).

Accepted for publication on 22-10-75.

calculus in the vagina. An interesting case of repeated vaginal calculi because of urethro-vaginal fistula was reported by Dalal (1962).

Vaginal calculi may be of different shapes and sizes with varying number. Pal (1935) reported a vaginal calculus fitting in whole of the vagina and protruding into the bladder. The largest 4" calculus has been reported by Stansfield (1942).

Chemically these vaginal calculi are known to contain salts of calcium, oxalate, phosphate, sulphate and urate (or uric acid). Sometimes a foreign body may also be found (Dalal, 1962).

Clinical Features

Symptoms of vaginal calculus are allied to those of foreign body in vagina i.e. pain, vaginal discharge and incontinence of urine where a fistula is present.

In our case the calculus caused retention of urine and patient initially had additional symptoms such as fever with chill and rigor.

The removal of the stone along with nucleus is obligatory and the cause of incontinence should be attended to. In case of unabsorbable material used previously it is essential to remove the sutures as well as the calculus. Moir suggested that operative cystoscopy may be resorted to in these cases. Calculus may be crushed or removed, intact through the fistula. Only exceptionally one may have to resort to suprapubic or vaginal cystostomy.

Summary

1. A case of vaginal calculus is reported in a lady aged 30 years with the history of vesico-vaginal fistula.

2. In the present case, instead of continued incontinence the patient had retention of urine. At late stage of calculus development patient also had fever with chill and rigor.

3. Carbonate, borate and sodium are found to be the ions taking part in constitution of the calculus, in addition to those reported so far.

References

1. Brayne.: Quoted by Ref. 2.
2. Dalal, D. S.: J. Obst. & Gynec. India. 12: 515, 1962.
3. Eton, B. L.: J. Obst. & Gynec. Brit. Emp. 63: 93, 1956.
4. Moir, J. C.: Chapter 4, In "the Vesico Vaginal Fistula" Pub. Blaillliers Tindall and Coz, 7 and 8 Henrietta Street, London.
5. Pal.: Cal. Med. J. 30: 102, 1935.
6. Stansfield, E. R.: J. Obst. & Gynec. Brit. Emp. 49: 82, 1942.