Procidentia incarcerated by multiple vesical calculosis: vaginal cystolithotomy for cystolithiasis

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Background: Incarceration of procidentia from multiple calculi in the cystocele in a post menopausal lady with long standing duration of pelvic organ prolapse treated by vaginal cystolithotomy, vaginal hysterectomy and pelvic floor repair is reported herewith.

Key words: procidentia, cystolithiasis, cystocele, cystolithotomy, pelvic organ prolapse.

Introduction

Multiple vesical calculi in a cystocoele are an uncommon cause of irreducible incarcerated procidentia in long-standing cases of total uterovaginal prolapse. ¹⁻³

Partial obstruction to urinary flow has been cited as being the cause for the vesicle stone formation. An open cystolithotomy had been performed at the time of an abdominal anti-incontinence procedure to remove the calculi but performed vaginal lithotomy in addition to vaginal hysterectomy and pelvic floor, reminiscent of surgery practice mentioned in the early sixties described in this case report.⁴⁻⁵

Case

A post menopausal elderly lady, 66 years of age and P10 (5 dead and 5 alive) with all home delivery, presented with acute urinary retention over the chronic genital prolapse that had appeared after her first child birth half a century ago.

All though she had been experiencing difficulty in passing urine because of prolapsed mass, being shy, concealed this problems to her entire family members until but 2 years back, when she confided to her daughter. She was a chain smoker, consuming one packet of cigarettes every day. During Examination there was procidentia (third degree uterovaginal prolapse where fundus also can be palpated outside the vaginal introitus; (Fig. 1) and the uterus could

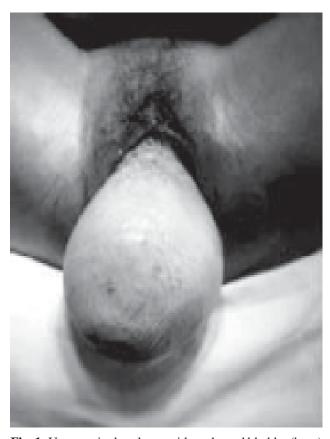


Fig. 1: Uterovaginal prolapse with prolapsed bladder (base) containing multiple bladder stones

not be placed inside.

There was huge cystocele which was of severe degree. An XRay was taken which showed calcified mass (Fig 2).

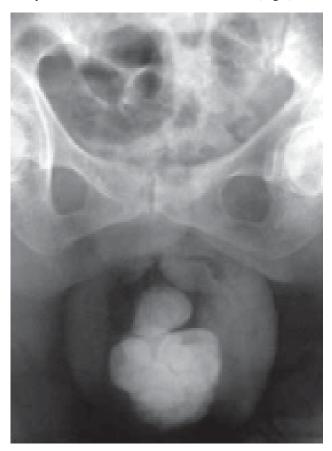


Fig. 2: X-ray showing the calcification of the prolapsed mass

Since there was urinary retention continuous catheterization was done with Foley's indwelling catheter. In order to reduce the induration and infection of prolapsed mass, combination antibiotic containing ampicillin and cloxacillin was started simultaneously which was continued up to 10 days covering the postoperative period. The investigations were as follows, blood Group was B+ve, hemoglobin 9.2 gm%, Blood urea 40 gm%, Blood sugar 82 mg%.

After the subsidence of indurations vaginal surgery was undertaken thereby removing multiple stones (fig 3) making a small linear incision on the bladder; after mobilizing it away from the cervix; vaginal cystolithotomy accomplished along with pelvic floor repair and vaginal hysterectomy under spinal anesthesia.

She recovered completely but needed anxiolytic for sleeplessness and euphoria which she developed



Fig. 3: Vaginal cystolithotomy in process.

postoperatively because of sudden relief of the devastating problem that had been disconcerting for long period.



Fig. 4: Retrieved multiple bladder stone

Discussion

The association of genito-urinary prolapse and bladder lithiasis being so very rare with only few reported cases, coming to the main diagnosis took a while, even though the prolapse mass was impossible to reduce. The reason for the irreducibility of the impacted prolapsed mass was, due to multiple bladder stones as learnt from the X-rays. Multiple vesical calculus and sometimes solitary large ones have been known to be associated with total prolapse. ^{2, 4, 6} Sometimes even third degree uterovaginal prolapse have been found to be associated with bladder calculi, average size of these calculi measuring 4 x 5 cm.

In our case, removing the stones vaginally from the bladder was a tedious job, as they numbered more than 15. Yet the removal was complete which was achieved by making an incision over the bladder after pushing it away from its attachment to the cervix. The average size of each stone measured about 3-4 cm each.

She was over relaxed with uneventful post operative recovery.

In conclusion, even though rare, occurrence of vesical calculi must be regarded as a possible cause whenever there is irreducible, incarcerated procidentia.

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