Primary Vaginolith Following Vesicovaginal Fistula – A Case Report

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ABSTRACT:

Vaginal stones are a rare entity. Primary vaginal stones result from urinary fistula, congenital abnormality, stasis of urine, and infection. We present a case where woman presented with pain during micturition. She had an emergency cesarean delivery for obstructed labor and had developed a vesico vaginal fistula that had a failed repair. Examination revealed a vaginal stone of 7X6 cm. She was managed by removal of the stone under anesthesia and successful repair of the vesico vaginal fistula was done after 3 months by modified O Cooner technique.

KEY WORDS: Primary vaginolith, Vesico vaginal fistula

INTRODUCTION

Vaginolith or vaginal stones are rare. Primary vaginoliths are formed from deposition of urinary salts as a result of collection of urine in vagina as in ectopic vaginal ureter, vesico-vaginal fistula, urethra-vaginal fistula and incontinence [1]. It also includes stones formed due to non fistulous urine collection in vagina as in case of reflux of urine into vagina in incontinence [2] or bed ridden patients. Sometimes, the stone may reach the vagina by ulceration of bladder stone through vesicovaginal septum. Most often vaginal stones are secondary vaginoliths formed around foreign body in the vagina.

We are reporting a case of primary vaginolith in a female who had undergone caesarean delivery in a rural hospital for obstructed labour and presented with pain during micturition.

CASE REPORT

married for 14 years and had an emergency caesarean delivery for obstructed labour at district hospital and extracted a fresh stillborn male baby 12 years back as per operative notes of the
She developed urinary leak from vagina which was noticed 2 weeks after Cesarean delivery. Repair of the fistula was done in the same hospital and was said to have been done by vaginal route and was catheterised for a month. She developed urinary leak after the removal of catheter. Lady had not gone for follow up after second surgery due to domestic reasons and says the leak had ceased 4 months post-procedure.

She presented to us with pain during micturition since a year and a constant dull ache in vagina. There was history of occasional episodes of burning micturition of the same duration. There was no history of fever. She had dyspareunia since several years and marriage had broken up due to it. Patient was amenorrhoiec since last cesarean delivery 9 years back.

General condition of lady was good. There was a midline infraumbilical vertical scar seen. Speculum examination revealed foul smelling vaginal discharge and a yellowish white hard mass in vagina with restricted mobility (figure 1). Rectal examination revealed mucosa to be normal. A hard mass of 7 X 6 cm was felt anteriorly and upper border of the mass could be reached. Since patient had pain during examination, it was planned for examination under anaesthesia after investigating.

Figure: 1 Speculum examination

Her haemoglobin was 12gm/dl, blood group and Rh typing was A positive, total counts were 7200 cell/cumm, differential counts being N 70, L 27, E 3, ESR was 40mm/hr. Urinalysis revealed trace albumin and 10-12 pus cells and culture revealed Escherichia Coli sensitive to Amikacin. Her renal function tests were normal.

X Ray KUB revealed a calcified lesion in pelvic region with density appearing equal to bone. CT scan abdomen and pelvis was performed and it revealed a huge calcified lesion of 7 X 6 X 5 cm in upper 2/3rd of vagina (figure 2). Uterus was not visualised. She was planned for examination under anaesthesia and removal of the stone.
A large vaginolith of 7 X 6 X 5 centimeters size in vagina was found. It was removed using volsellum with Sims speculum used to protect bladder and rectum and assisted by relaxing perineal incision (figure 3). After extraction of the stone, leakage of urine from vagina was detected. A fistula of 1.5 X 1.5 cm size was noted after passing a red rubber catheter. Methylene blue dye test revealed a vesico-vaginal fistula. Indwelling Foley’s catheter was put and antibiotic were continued. After 3 months, patient was operated for the vesico-vaginal fistula by Modified O’ Cooner technique with interposition of omental graft and had a successful repair.
DISCUSSION

Stone in the vagina are rare. They can be classified as primary or secondary. Primary vaginal stones are formed from deposition of urinary salts as in genitourinary fistula. Most of the stones are secondary and formed around foreign body in the vagina as with surgical sutures or forgotten material placed in vagina [3]. Displaced IUCD was also reported to cause a secondary vaginolith [4].

The case presented above is a rare case where stone was formed due to vesico-vaginal fistula caused as a complication of caesarean delivery done for obstructed labour. Lithogenic factor in our case was urinary flooding of vagina due to urogenital fistula. The stone was formed probably due to sedimentation of urinary salts in vagina due to leakage of urine from uro-genital fistula. The initial leak was probably stopped due to stone formation which lady mistook for improvement. Dyspareunia had broken her sexual life and due to poor literacy, she did not attend medical facility for the same, it remained undetected and probably the stone might have acted as nidus for further deposition of urinary salts around it. As the stone had gained big dimension, she did not complain of urinary leak thereafter.

Since vaginal examination was painful, radiological assessment using X Ray and CT scan was done prior to surgery. The stone needed anaesthesia for removal with relaxing perineal incision as it was big. Some objects are easily removed even without anaesthesia. Instruments like obstetrics forceps have also been used to remove same stone [5]. The patient was kept on antibiotics and we delayed surgery for three months after removal of the stone to allow infection and inflammation to resolve. Repair of the fistula was successful.
CONCLUSION

Primary vaginoliths are rare. The case illustrates the development of a primary vaginal stone due to deposition of minerals as a result of urinary leak due to genito urinary fistula. Management principle should include removal of the stone and repair of the fistula done after the reduction of the inflammatory process to increase the success of the surgery.

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