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Gossypiboma – A Rare Cause of Vesico-Vaginal Fistula

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Abstract
Gossypiboma also known as textiloma refers to a retained foreign body in the body after any operation. It is a rare but dreadful complication which is usually under reported due to medico-legal implications. It can present in numerous ways and can even remain asymptomatic for years after operation. Here, we are reporting a case of gossypiboma presenting as a vesico-vaginal fistula. A 65 years old lady presented with discharge per vaginum, bleeding per vaginum and hematuria. She had a history of vaginal hysterectomy six years back for uterovaginal prolapse and left radical nephrectomy for hematuria and cysts in left kidney five years back. On clinical examination and radiological investigations, a retained foreign body was suspected. On laparotomy, gossypiboma was visualized which had migrated into the bladder through vesico-vaginal fistula. The retained gauze piece was removed followed by vesico-vaginal fistula repair.
Keywords: *Gossypiboma, textiloma, retained foreign body.*

Introduction

The word "Gossypiboma" is derived from two Latin words gossypium (cotton) and boma (place of concealment)[1]. The retained foreign body leads to two types of reaction- Exudative type with abscess formation and aseptic fibrotic type with granuloma formation.[2] Gossypiboma presenting late in the course can pose serious diagnostic dilemma. It is a rare surgical complication but can significantly increase morbidity and mortality, cost of treatment and medico-legal problems. So, it should always be kept in mind as differential diagnosis in a post operative patient with non-specific complaints.

Case Report

A 65 years old lady presented to us with complaints of discharge per vaginum, bleeding per vaginum and hematuria. She had undergone vaginal hysterectomy at a different hospital 6 years back in view of postmenopausal uterovaginal prolapse. About 10 months after this surgery she started having blood mixed discharge per vaginum and hematuria. Bilateral renal cysts were seen on ultrasound KUB and PET CECT scan showed left renal soft tissue mass lesion and another soft tissue lesion indenting bladder anteriorly. The patient underwent left radical nephrectomy at another hospital a year after vaginal hysterectomy. Histopathological diagnosis

was benign oncocytoma of left kidney. She continued to have on and off hematuria and discharge per vaginum.

On per speculum examination, a fibrous mass extruding from the vault was seen likely a gauze piece (Figure 1). On per vaginal examination, a vague soft mass was felt on the vault.

Her urine was full of pus cells however vault smear was normal.

X ray KUB showed soft tissue densities in left renal and right hemipelvis regions (Figure2)

Cystoscopy revealed a floating irregular mass with cotton fibers and calcification. (Figure 3).

MRI showed a soft tissue lesion in the region of vaginal vault with infiltration of posterior wall of bladder. Also few lobulated hypodense contents in bladder. No enlarged lymph nodes.

Laparatomy and extraperitoneal approach to bladder was planned. However peritoneum got accidently opened. A transverse incision was given on the dome of bladder. There was a foul smelling free mass of around 2x 2 cm floating in the bladder. Also a gauze piece with calcification was seen coming through a defect in posterior wall of bladder (figure 4). The fistula was communicating to the anterior vaginal wall and gauze was also going in the vagina through this fistulous tract.

After foreign body removal, vesico-vaginal fistula was repaired in layers. Patient stood the operation well and foley's catheter was removed on 21st postoperative day.

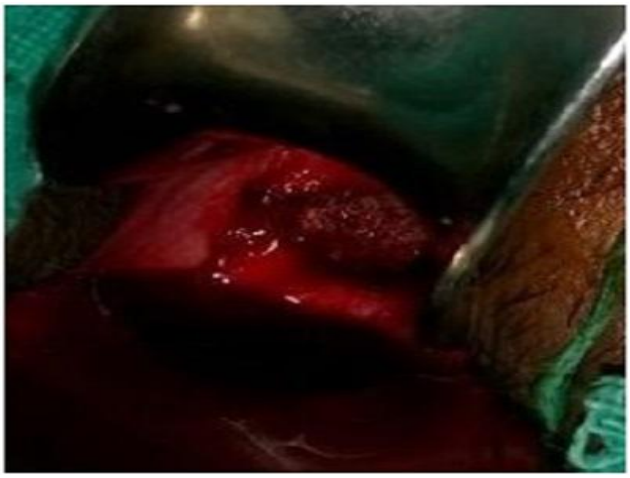

Figure 1: Per speculum examination showing a fibrous mass extruding from the vault

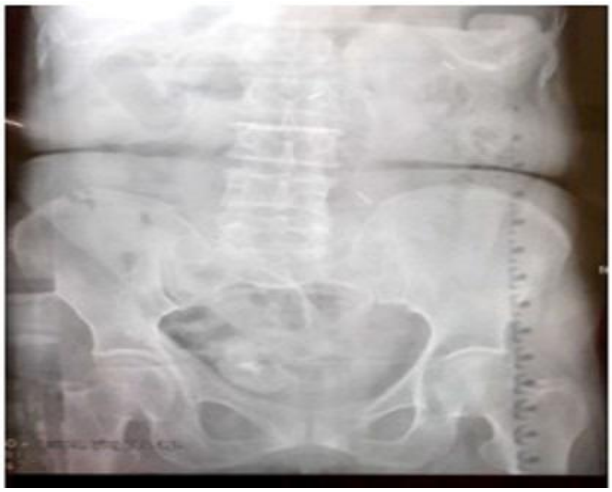

Figure 2: X ray KUB showing soft tissue densities in left renal and right hemi-pelvic regions

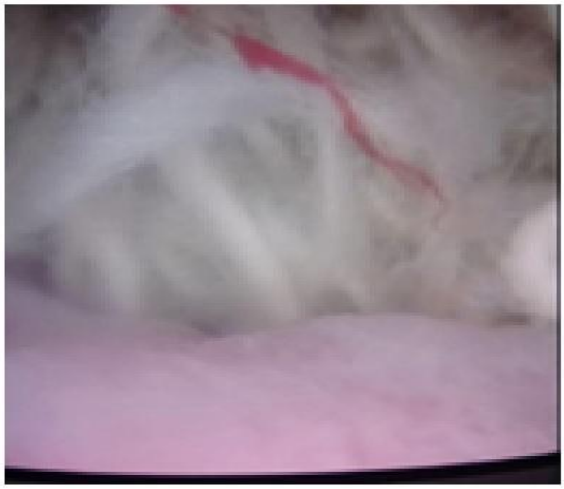

Figure 3: Cystoscopy showing an irregular mass with fibrous strands and calcification seen in the posterior wall of bladder

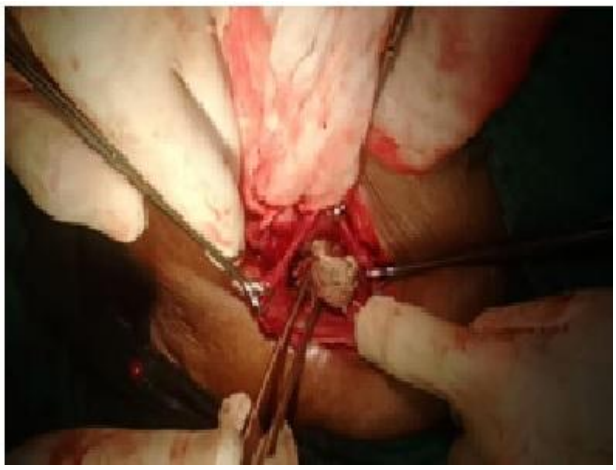

Figure 4: Foul smelling gauze piece with calcification seen coming through a defect in posterior wall of bladder seen on cystostomy

Discussion

Gossypibomas are most commonly found in abdominal cavity[3] with an incidence of 1 in 1000 to 1500 laparotomies[4]. However, the incidence is usually under estimated because of low reporting of the cases due to medico-legal implications and also due to diagnostic dilemmas associated with it[5].

The various risk factors associated with gossypiboma include emergency surgery, change in scrub nurses, involvement of more than one surgical team, obesity, hurried sponge count and prolonged surgery[3,6]. Gossypiboma causes two types of biological reactions: exudative type leading to abscess formation and aseptic fibrotic type leading to granuloma formation[2]. Exudative reaction involves secondary bacterial infection leading to fistula formation[7] and occurs in early post-operative period. The primary factors which determine the presentation of gossypiboma are the site and size of sponge. It can present at any time ranging from a few days to several years after initial surgery. Patients usually present with vague complaints like abdominal pain, nausea, vomiting, fever, anorexia, abdominal distension, altered bowel and bladder habits or palpable mass[8]. About one – third of patients remain silent with retained foreign body detected only by radiological investigations[7]. In our case, the gauze piece was forgotten at the time of vaginal hysterectomy which had resutled in vesico-vaginal fistula leading to hematuria.

Radiological investigations are the mainstay of diagnosis of gossypiboma, however they have limited scope if swab is not radiologically marked because cotton gauze can mimic abscess, hematoma as well as tumor[6]. This coupled with the vague presentation may cause serious diagnostic dilemma. In our case, hematuria with renal mass lesion had resulted in wrong diagnosis of suspected renal neoplasm and left nephrectomy.

Gossypiboma is an avoidable but serious post-operative complication which can be prevented by meticulous counting of all surgical materials, thorough exploration of abdominal cavity and by using radio-labelled sponges[9].

The treatment of gossypiboma is surgical removal usually through previous operative site but endoscopic or laparoscopic approaches may also be attempted. In our case, gossypiboma was removed on laparotomy followed by vesico-vaginal fistula repair.

Conclusion

Gossypiboma is a rare but potentially avoidable post-operative complication. It is usually asymptomatic and causes vague symptoms so diagnosis is often delayed. It should always be considered in differential diagnosis of any post – operative patient presenting with non – specific complaints so as to avoid unnecessary medical and surgical interventions which increase the morbidity of the patient. It can be prevented by complying with current recommendations on prevention of retained foreign bodies which includes meticulous sponge and swab count.

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