

Calcified Intravesical Gossypiboma Following Abdominal Hysterectomy: A Case Report

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ABSTRACT

A retained surgical foreign body is a ubiquitous medical error which occurs when nonabsorbable materials are used. The migration of a retained surgical sponge into the bladder after a gynecological procedure is rare. The calcification of

migrated sponge inside the bladder without a fistula is even more unusual. This is a rare case in which the surgical sponge accidentally retained after abdominal hysterectomy, eroded into the bladder with calcification around it forming a big vesical calculus.

Key Words: Stone, Bladder, Human

INTRODUCTION

Gossypiboma is derived from 'gossypium' ['cotton' in Latin] and 'boma' ['place of concealment' in Swahili]. It is also known as textiloma or cottonoid. It is a term which is used to describe a mass in the body that comprises of a retained surgical sponge and reactive tissue [1]. A retained surgical foreign body is a ubiquitous medical error which occurs when non-absorbable materials are used. The most common surgically retained foreign body is the laparotomy sponge [2]. Herein, we report a case of calcified intravesical gossypiboma which occurred 15 years after abdominal hysterectomy.

CASE REPORT

A 58 year old lady presented with complaints of haematuria of two weeks duration and retention of urine for one day, for which a Foley's catheter was put inside her. She had a history of burning micturition for 3 months. She had undergone abdominal hysterectomy 15 years back, with an uneventful convalescence.

On examination, she was found to be anaemic, with lower abdominal tenderness. X-Rays of the KUB region showed a radio opaque vesical calculus in the bladder region. Abdominal sonography revealed a vesical calculus measuring 6 × 7 centimeters. The Urine culture and sensitivity tests were positive for Escherichia coli. At this stage, a possibility of differential diagnoses like vesical calculus with cystitis, migrated calcified sponge and bladder tumour with encrustation were made. The infection was treated with appropriate antibiotics. After the pre-operative evaluation, the patient was taken up for Cystoscopy and further procedures. Cystoscopy revealed a huge vesical calculus with the evidence of bullous oedema at the trigone. It was decided to do an endoscopic removal of the calculus with lithotripsy [Table/Fig-1] [Table/Fig-2]. Once the calcified shell was fragmented with the lithotripter, a big gauze was found inside, which was pulled out bit by bit through the urethra by using an endoscope [Table/Fig-3]. An Adequate bladder wash was given and the clearance of the stone fragments was confirmed by repeat cystoscopy. The patient had a remarkable recovery and was discharged after two days.



[Table/Fig-1]: Extracted gauze



[Table/Fig-2]: Gauze being pulled out per urethra



[Table/Fig-3]: Gauze being pulled out per urethra in the lithotomy position

DISCUSSION

Usually, the urinary bladder lies deep in the pelvis and it is inaccessible for the introduction of foreign bodies into it, but surprisingly, so far, diverse objects have been recovered from the bladder. Any foreign body lying around the urinary bladder has got a potential of migration into the bladder. Over the years, a calculus formation can occur around the foreign body. These foreign bodies are categorized into three subgroups based on the mode of their entry into the bladder [3].

Type 1- They may either be self introduced for sexual gratification or consequences of psychiatric illness.

Type 2- They may be of the iatrogenic types, where the foreign body is left behind in the bladder at the time a major bladder surgery or as a result of transurethral endoscopic instrumentation or catheterization. Sometimes, the foreign body is inadvertently inserted into the female urethra in an attempt to procure abortion or to prevent conception [4].

Type 3- They may be of the migratory type and may usually migrate from the uterus, rectum, pelvis and vagina. Migratory foreign bodies can enter into the bladder from the rectum like a broken piece of rectal thermometer [5] and from the uterus, commonly an intrauterine contraceptive device [6], which may act as a nidus for stone formation. Bodenbach M and Riaz reported the intravesical migration of polypropylene mesh which was used for hernia repair [7, 8]. The urethral expulsion of distal end of a ventriculoperitoneal shunt catheter [9], and a screw after plate fixation of symphysis pubis [10] has been reported in literature. Sharma UK et al reported a case of an accidentally retained surgical sponge following abdominal hysterectomy which eroded into the bladder and came out spontaneously through the urethra without forming a vesical calculus [4].

Intravesical foreign bodies usually present with lower urinary tract symptoms and this is considered as one of the most important differential diagnosis. The Symptoms of intravesical foreign bodies are usually like those of acute cystitis, like frequency, urgency, dysuria, haematuria and strangury. Few patients may also present with the features of difficulty in voiding and urinary retention. Ec Ford et al reported the common symptoms of dysuria, haematuria, frequency, strangury and urethral discharge in his series. [6] In this case, the patient mainly presented to us with a history of severe dysuria, haematuria and retention of urine.

Radio opaque intravesical foreign bodies can usually be detected on KUB radiography. Abdominal and transvesical ultrasound helps in detecting radiolucent foreign bodies [11,12].The Ultrasonic appearance of intravesical foreign bodies will vary depending on their nature because the degree of echogenicity of a foreign body is dependent on the difference in the acoustic impedance between the foreign body and the surrounding tissue [13]. Cystoscopy can identify the type and location of the foreign body and it is an important tool for assessment at the time of treatment [14].

The initial management of the patients with intravesical foreign body should be analgesics and antibiotics. A Definitive management aimed at complete removal of foreign body with minimal complications [15]. Marshall et al reported the use of a specially constructed prolene snare intra-operatively to facilitate the safe and rapid extraction of an intravesical metallic pipe by cystoscopy [16]. Wyatt et al reported the use of a holmium laser to cut the foreign body and to retrieve it endoscopically [17]. Habermacher et al reported the use of a holmium laser to fragment a detached resectoscope tip before its transurethral removal [19]. In our case we used a Cystoscope and a pneumatic lithotripter to fragment the outer core of the foreign body and retrieved the gauze under the guidance of Cystoscopy.

The migration of a retained surgical sponge into the bladder after a gynaecological procedure is very rare, although seventeen cases have been reported from Japan [19]. The calcification of the migrated sponge inside the bladder without a fistula is even more unusual.

This case presented to our hospital with a history of dysuria, haematuria and the retention of urine due to a huge intravesical calculus with severe cystitis, for which she needed catheterization. This case is unique as the migrated sponge has presented with calcification inside the bladder with a healed fistula, after a prolonged interval of fifteen years.

This case is being reported for its rarity, as the literature has not revealed such a case of the migration of a sponge with calcification with healed fistula and to increase the awareness regarding the possibility of a foreign body inside the bladder, in a patient with a history of previous pelvic surgery.

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