



CASE REPORT

Intravesical textiloma mistook for bladder stone: A case report

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Key Clinical Message

Intravesical textiloma is a rare surgical complication, that may cause nonspecific lower urinary tract symptoms. Clinicians should consider it in patients with a history of bladder surgery and persistent or new-onset urinary symptoms.

Abstract

Intravesical textiloma is a rare condition usually presents asymptomatic or with non specific symptoms. A 72years old man with prior open prostatectomy presented lower urinary tract symptoms and diagnosed with bladder stones, explorative laparotomy revealed semi calcified gauze. Similar history should prompt suspicion of this condition.

KEYWORDS

bladder tumor, case report, foreign body, retained surgical sponge, textiloma

1 | INTRODUCTION

The term “Textiloma” refers to a retained surgical sponge or gauze in the body’s cavities, such as the abdomen, pelvis, skull, or chest.¹ Half of the cases are commonly found in the abdomen and pelvis.² Textiloma are of common occurrences but rarely reported and published due to medical legal implications and criticism from the medical profession and public at large.¹

Due to being asymptomatic or the presence of non-specific symptoms and inconclusive imaging findings they tend to stay for several years without an accurate diagnosis.³ In this report, we present a case of a 72 years old man with an intravesical textiloma that was mistaken for

bladder stone with a differential of bladder tumor in the preoperative assessment.

2 | CASE PRESENTATION

A 72-year-old man was admitted to the hospital with complaints of weak urine stream for 2 years. Despite straining, his urine stream did not improve and he reported incomplete bladder emptying and urinary urgency. The patient reported a history of benign prostatic hyperplasia and an open prostatectomy in 2019. He reported no hematuria, pelvic trauma, urethral discharge, lower back pain, limb numbness, or tingling sensations. He was also diagnosed

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with osteoarthritis and is currently undergoing physiotherapy. He has no history of hypertension or diabetes. The patient had a lifelong history of snuffing tobacco and was currently smoking one pack of cigarettes per year. He only drank alcohol occasionally at social functions.

On physical examination, the patient appeared elderly and had hand tremors and an obvious cataract in the left eye. He was in fair health and his vital signs were as follows: blood pressure 101/62 mmHg, pulse 98 bpm, temperature 38.8°C, and respiratory rate 18 breaths/minute. The examination of the abdomen showed a healed sub umbilical midline incision scar, slight supra-pubic tenderness, and no palpable organs or distension. Examination of the external genitalia showed a circumcised penis with no induration on the ventral aspect, no palpable mass over the penile shaft, and normal scrotum and testis. Digital rectal examination revealed a normal anal verge, a Grade 1 prostate that was firm, non-nodular, symmetrical with a median sulcus.

The laboratory investigation showed normal parameters. The urine analysis revealed cloudy and turbid urine with +++ blood, 1–5 RBC/hpf, numerous white blood cells, and ++ bacteria stain. However, there was no bacteria growth was seen on the urine culture. The kidney, ureter, and bladder (KUB) ultrasound showed an echogenic mass in the urinary bladder suggesting a bladder stone and a right simple renal cyst. On the scout film of the retrograde urethrogram, there was a wide calcification whereby a stone was suspected (Figure 1). However, the anterior urethra was normal (Figure 2).

The provisional diagnosis was bladder stone with differential of bladder tumor and a plan was made to conduct a cystoscopy and needful depending on findings. The urethrocystoscopy showed a normal urethral meatus and anterior urethra, with a normal posterior urethra, verumontanum, and open bladder neck. The bladder contained a well-formed, calcified gauze attached to the

posterior wall and dome. The decision was made to perform an open cystotomy in which a brown, semi-calcified, full gauze that was completely attached to the dome and posterior wall of the bladder (Figure 3) was found. The postoperative event was unremarkable. The patient was given ceftriaxone 1 g BD 5/7 days discharged on Day 7 postoperative and catheter was removed on day 14 postoperative. The feedback concerning the retained gauze was provided to the institution where the first procedure was done.

3 | DISCUSSION

Intravesical textiloma refers to surgical sponges retained in the bladder following surgery.⁴ Textiloma incidence tends to vary and is difficult to estimate as most of the cases are unreported due to medical-legal reasons.¹ Presence of intravesicular textiloma is rare;⁵ however, some studies have estimated the incidence to be one in 100–3000 surgical cases for all surgical interventions and one in 1000–1500 for intra-abdominal operations.⁶

Textiloma is associated with various factors such as complicated surgeries involving multiple teams and procedures, which increase the risk of information loss with each change of staff. Emergency surgical procedures also pose a risk as sponge and instrument counting may not be a high priority. Other factors include obesity, poor communication among the team, incorrect or failed surgical count, and high blood loss intraoperatively.^{1,4,7} In our case, the previous surgery was done in another hospital and therefore we could not find the associated factors which lead to retained gauze.

Textiloma in early stages are often asymptomatic and are diagnosed incidentally either during examination of other conditions or based on clinical suspicion. However, they can become clinically significant and cause non-specific symptoms due to the body's inflammatory response to the foreign material.^{1,8} Presentations of vesicular textiloma are usually related to those of lower urinary tract symptoms and urinary tract infections (UTI) such as include pain or irritation, nausea, and vomiting.⁴ Complications associated with textiloma include abscess, infection, visceral perforation, obstruction, fistula formation, and intraluminal migration.^{1,8} In our case, the patient presented with lower urinary tract symptoms.

Detection of textiloma is mainly done through radiological imaging such as computed tomography scans, radiographs, and ultrasound. They tend to appear as radiopaque, spongy structure and may present with calcifications in radiographs. In ultrasound, it tends to present as echogenic masses or fragments.^{1,4} A high index of suspicion is required as the textiloma may be confused with a

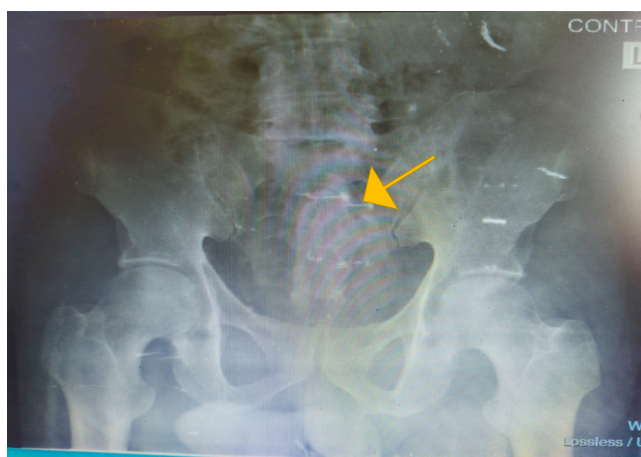


FIGURE 1 Scout film with suspected bladder stone (arrow).



FIGURE 2 Normal retrograde urethrogram.



FIGURE 3 Gross pathology of the retained gauze.

bladder mass or bladder stone. In our case also, the gauze was calcified and appeared as radiopaque structure.

Management of textiloma once detected involves surgical removal of the foreign body, with open exploration being the commonly used method as it was used in our case.⁴ However, depending on the location, size of gauze, and skill of the surgeon, a minimally invasive technique such as laparoscopic and urologic endoscopic procedures such as cystoscopy can be utilized. In our case, the gauze was very big to be removed endoscopically.^{4,5,7}

To lower associated mortality and morbidity, prevention is crucial. To prevent textiloma, gauze counting should be performed regularly during surgical procedures and the whole surgical team should be held accountable for any missing items.^{1,8} Using the surgical checklist such as the WHO checklist can help improve surgical safety and lower incidence of textiloma.⁸ It is the responsibility of leading surgeons in theater and theater in-charges to

make sure the checklist is strictly adhered to avoid unnecessary sequela post-surgery such as textiloma.

4 | CONCLUSION

Textiloma should be suspected in any patient presenting with lower urinary symptoms with a previous history of open surgery of the bladder or prostate. Prevention of textiloma is possible with strict adherence to WHO checklist. Open exploration and removal of gauze are safe and effective ways of managing textiloma.

AUTHOR CONTRIBUTIONS

Jonaviva Anthony Thomas: Writing – original draft. **Bartholomeo Nicholas Ngowi:** Writing – review and editing. **Janeth Mpelumbe:** Writing – original draft. **Gideon Mwasakyalo:** Writing – review and editing. **Jasper Saidi Mbwambo:** Writing – review and editing. **Jack Bogdanowicz:** Writing – review and editing. **Frank Bright:** Writing – review and editing. **Alfred Kien Mteta:** Writing – review and editing. **Orgeness Jasper Mbwambo:** Supervision; writing – original draft.

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CONFLICT OF INTEREST STATEMENT

Authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

No new data were created or analyzed in this study. Data sharing is not applicable to this article.

CONSENT

Written informed consent was obtained from the patient who participated in this case.

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