

“Obstetric Sutures Gone Astray: Bladder Erosion of a Cerclage Suture Leading to Recurrent UTIs”

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INTRODUCTION/ BACKGROUND

- Cervical cerclage is generally safe procedure commonly performed to prevent preterm birth and miscarriage in women with cervical insufficiency¹⁻⁴.
- Rare complications such as suture erosion and migration into adjacent organs, including the bladder, can occur⁵⁻⁸.
- Lower urinary tract symptoms from rare complications may cause significant delays in diagnosis and treatment due to their infrequency.

OBJECTIVES

- To describe a rare, delayed complication of cervical cerclage involving erosion and migration of suture material into the bladder resulting in chronic urinary tract symptoms.
- To illustrate the clinical presentation and diagnostic approach for bladder erosion of cerclage suture as a differential diagnosis for recurrent urinary tract infections.
- To emphasize the diagnostic value of imaging and cystoscopy in patients with chronic urinary tract symptoms and a history of prior gynecologic procedures

CASE PRESENTATION

- A 31-year-old multiparous female (G2P1102) presented with a three-year history of recurrent urinary tract infections, dysuria, urinary frequency, intermittent gross hematuria, and pelvic pain.
- Past medical history was notable for two prior cervical cerclages.
- Initial urinalysis was positive for cystitis, but multiple courses of antibiotics failed to resolve her symptoms.
- CT imaging revealed a curvilinear hyperdense foreign body within the bladder (Figure 1). Cystoscopy under anesthesia identified a calcified Prolene suture at the bladder base (Figure 2).
- The suture was excised entirely and follow-up CT confirmed complete suture removal. The patient had an uneventful postoperative course and remained asymptomatic at follow up visits.

FIGURES

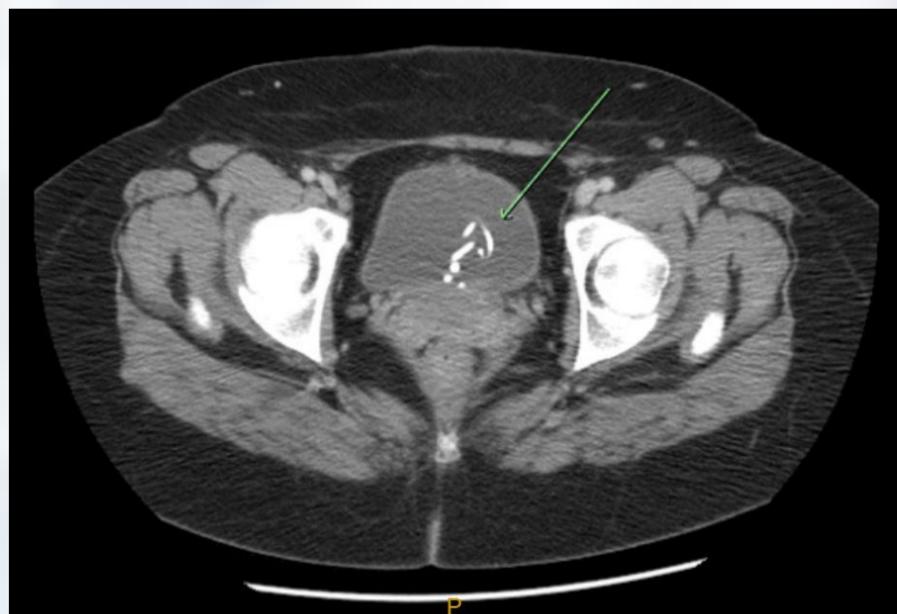


Figure 1: CT scan of the abdomen and pelvis showing a fragmented, curvilinear foreign object in the bladder (green arrow).

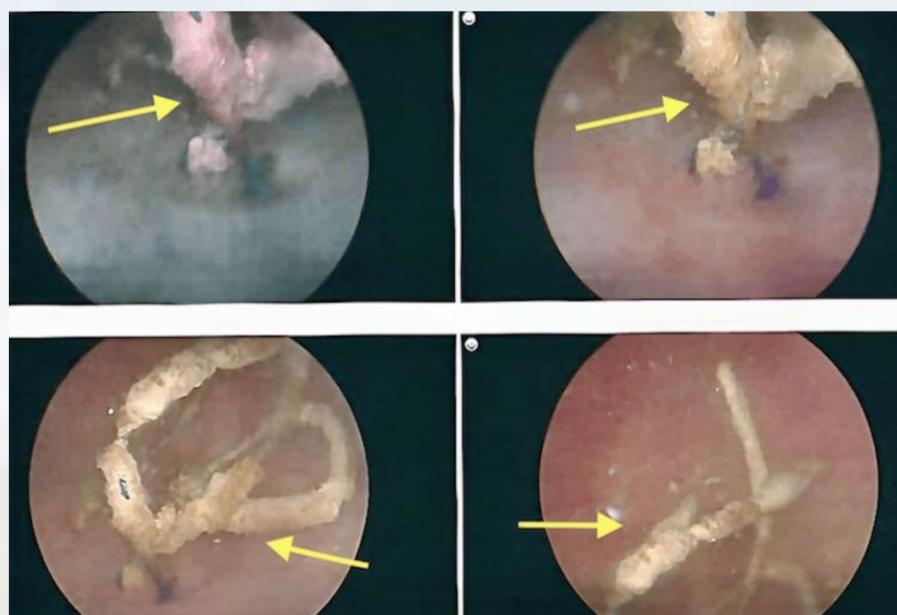


Figure 2: Cystoscopy showing calcified Prolene suture at the bladder base (yellow arrows).

DISCUSSION

- Bladder erosion of cerclage suture is an exceedingly rare cause of lower urinary tract symptoms. The differential diagnoses included recurrent uncomplicated urinary tract infection, interstitial cystitis, myofascial pelvic floor dysfunction, and intravesical pathology such as tumors or calculi.
- This case highlights the importance of imaging and cystoscopy in women with unexplained lower urinary tract symptoms and a history of prior gynecologic procedures. Cystoscopy was both diagnostic and therapeutic through intravesical foreign body identification and by facilitating definitive surgical management.
- Although literature on adjunctive OMM for treatment of cystitis is limited, general goals include improving motion of the bladder and its supporting ligaments and fascia, as well as decreasing edema secondary to acute inflammation or infection⁹. As the patient’s symptoms resolved upon surgical management, additional treatment with OMM was no longer indicated.

CONCLUSION

- Clinicians should maintain a high index of suspicion for iatrogenic foreign bodies in patients with recurrent lower urinary tract symptoms, especially in women with a history of pelvic procedures.
- In women experiencing chronic lower urinary tract symptoms, early recognition of intravesical foreign bodies with the use of imaging and cystoscopy can reduce diagnostic delay and facilitate definitive surgical removal, resulting in complete symptom resolution and optimized patient outcomes.

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REFERENCES

