

## Sling Penetration into the Bladder after Anti-incontinence Surgery

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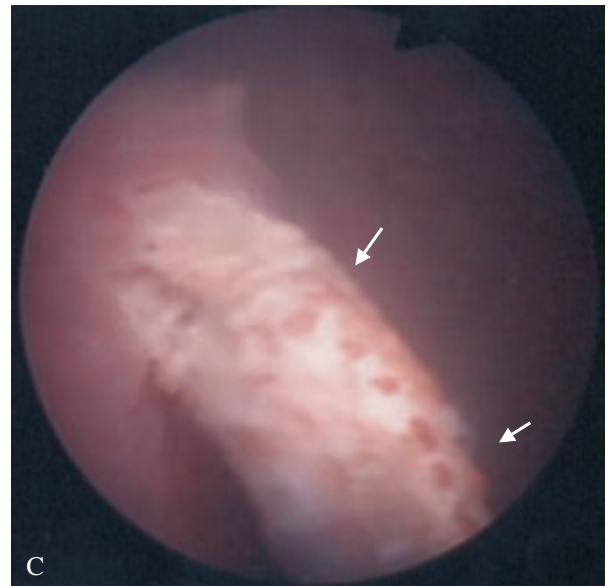
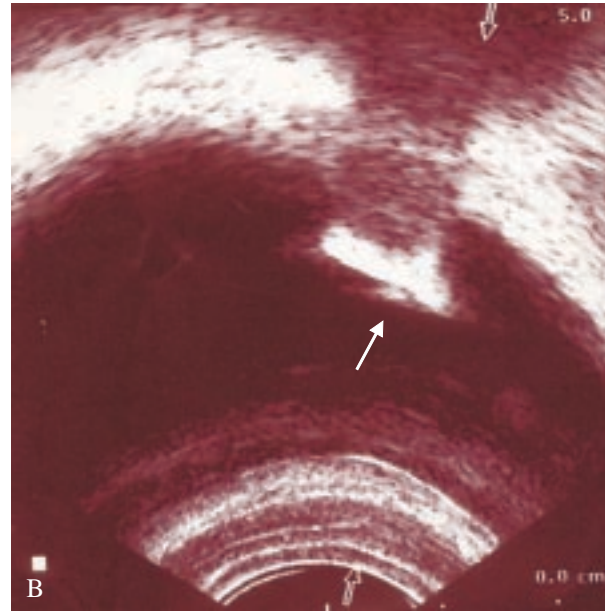
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A 45-year-old woman had undergone anti-incontinence surgery by a gynecologist for stress urinary incontinence and uterine prolapse. One month after the procedure she began to feel terminal miction pain and frequency urgency, and experience occasional urge incontinence. The voiding pattern was intermittent and a large postvoid residual volume was noted. Urinalysis revealed pyuria and she was treated for urinary tract infection with antibiotics. However, the symptoms exacerbated even after treatment. Therefore, she was referred for further investigation. From her past history, the first tentative diagnosis was penetration of surgical material into the bladder wall. Transrectal sonography of the bladder was performed and a hyperechoic foreign body shadow was found at the right anterior lateral wall of the urinary bladder (Figs. A, B). The shadow was fixed to the bladder wall and encrustation calculi were noted on the foreign body. Cystoscopy was performed to confirm the diagnosis and a sling with encrustation was found penetrating the right anterior lateral portion of the bladder wall (Fig. C). The encrustation calculi on the sling were removed by cystolithotripsy, and the penetrating sling was removed by transvaginal cutting of the sling and extraction from the lower abdominal incision. Grossly, the sling was a surgical tape without mesh pores and was roughly fashioned. The patient soon regained a normal voiding pattern and became free from urgency symptoms.

### COMMENTS

Penetration of a sling into the bladder should be considered when a patient has newly developed lower urinary tract symptoms after anti-incontinence surgery, especially when pyuria or hematuria is also detected. A sling may penetrate the bladder wall without appearing in

the bladder lumen in the early postoperative period. However, it may migrate into the bladder lumen with time. Postoperative transrectal sonography of the bladder and cystoscopy can detect this complication at an early stage.



**Fig.** Sling penetration after antiincontinence surgery. (A) A hyperechoic foreign body shadow in the anterolateral wall of the bladder (white arrow), (B) the shadow adhered to the bladder wall, (C) cystoscopy revealed a synthetic sling penetrating the bladder wall (white arrows).

