

Acute Urinary Retention in a Female Following Bladder Tumor Resection Due To a Stone in a Urethral Diverticulum

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A 56 years old female smoker presented with recurrent urinary tract infections but no hematuria. Pelvic exam revealed an indurated area on the anterior vaginal wall. Magnetic resonance imaging (MRI) revealed a suspicious area around the urethra which was thought to be tumor extension from a bladder cancer (**Figure 1**). Rigid cystoscopy demonstrated a tight urethra and a bladder tumor. Histology confirmed adenocarcinoma. The patient developed acute urinary retention following catheter removal and commenced intermittent catheterization. Due to the aggressive histology and concerns over urethral involvement, a repeat MRI (**Figure 2**) was performed to permit local staging with a view to exenteration. This was preferred over a transvaginal scan as resection had confirmed a neoplastic process. When compared to the initial MRI a stone was seen, which had initially been suspected to be direct tumor extension, but no adenopathy. Repeat cystoscopy showed a large stone in a urethral diverticulum and recurrent bladder tumor. The stone was dislodged and treated with laser lithotripsy. The patient was treated with pelvic exenteration and adjuvant chemotherapy for a pT4 N2 bladder cancer. Urethral diverticulum stones may cause recurrent urinary tract infections in females.⁽¹⁾ Laser lithotripsy and diverticulum repair have been described.⁽²⁾ MRI has limitations when assessing female urethral pathology.⁽³⁾

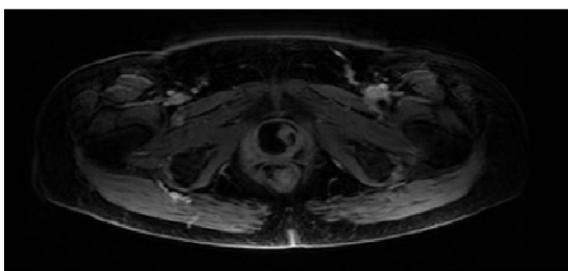
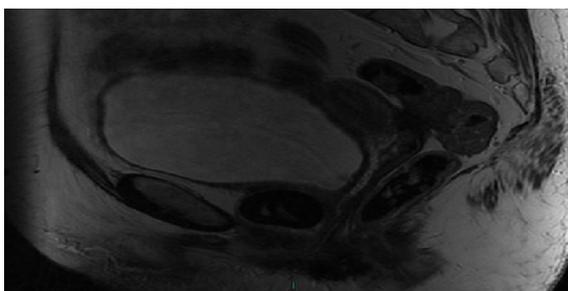


Figure 1. Magnetic resonance imaging (MRI) demonstrating a suspicious area around the urethra.

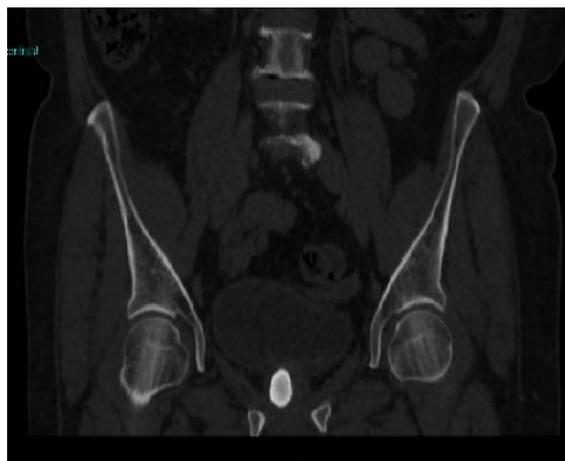


Figure 2. Repeat magnetic resonance imaging (MRI) demonstrating a stone when compared to the initial MRI.

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