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

Osama Z Abusanad, Michael S Floyd (Jr),* Altaf Qadir Khattak

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.

REFERENCES