

Hydronephrosis as a Late Complication of ProACT Implantation

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An 83-year-old male was referred to the urology clinic because of acute kidney failure and perineal pain and urinary urgency. The patient was treated in 2009 with implantation of an adjustable continence therapy device (ProACT, Uromedica), because of stress urinary incontinence (SUI) after radical prostatectomy (RP).^{1,2} The procedure was performed with transrectal ultrasound (TRUS) guidance under local anesthesia.³ At the admission, the patient reported perineal and left flank pain. Serum creatinine level was 1.45 mg/dL. All other blood and urine test results were within range. Computed Tomography (CT) imaging (Figs. 1 and 2) revealed left hydronephrosis due to compression of the distal tract of the left



Figure 1. Coronal CT image showing dislocation of left adjustable continence therapy device (arrow).



Figure 2. Coronal CT image showing left hydronephrosis.

ureter by the left side balloon of the device that migrated in the retroperic space, 3 cm above the original position.

What would you do next? (A) Perform a left nephrostomy; (B) Positioning a left ureteral stent; (C) Deflate, remove, and eventually reimplant the device; (D) Deflate the balloon without removing the device.

What to do next? (C) Deflate, remove, and eventually reimplant the device.

Implanting a ProACT is a safe and efficacious treatment for SUI after RP. The adjustable continence therapy has high rate of migration as long-term complication.⁴ The first line treatment after the dislocation of the device causing complications (hydronephrosis, erosion, infections) is the explantation since the procedure is brief and minimally invasive. The patient underwent explantation of the device, performed with TRUS guidance under local anesthesia through two small perineal incisions. Two days later the patient was dismissed after the normalization of the serum creatinine level (0.79 mg/dL) and resolution of hydronephrosis and pain. No complication occurred, except for the recurrence of

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Submitted: September 20, 2023, accepted (with revisions): March 8, 2024

urinary incontinence (use of 3 pads/die). Patients can be reimplanted or treated with a more invasive treatment option. In our case, the patient decided not to be reimplanted with a new device. Serum creatinine level at 3, 6, and 12 months after the procedure was in range and the abdominal ultrasound tests showed no recurrence of hydronephrosis.

Declaration of Competing Interest

The authors declare that they have no conflict of interest.

Acknowledgment. The authors received no financial support for the research, authorship, and/or publication of this article.

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