Bladder Outlet Obstruction Induced by the Compression of Displaced Hemipelvic Prosthesis After Pelvic Reconstruction: A Case Report

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Bladder outlet obstruction (BOO) is a common urological condition usually caused by benign prostatic hyperplasia, prostate cancer, urethral stricture, rarely by compression of surrounding organs. Herein we presented a BOO patient caused by the compression of displaced hemipelvic prosthesis after pelvic reconstruction. This report may help to increase awareness of BOO as a late complication of pelvic reconstruction. UROLOGY 133: e9–e10, 2019. © 2019 Elsevier Inc.

A 55-year-old male presented to the local hospital with a 3-year history of difficulty of urination. Computed tomography showed acute urinary retention, bilateral ureteral distension, and hemipelvic prosthesis displacement (Fig. 1). Indwelling catheter failed. Then, the patient was transferred to our emergency depart-

Figure 1. Computed tomography. (A) This image showed distended ureters; (B) this image showed distended bladder and severely internal displacement of artificial hip joint; (C, D) internal displacement of hemipelvic prosthesis and adjacent bone fragments compressed the posterior urethra.

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Submitted: June 18, 2019, accepted (with revisions): July 15, 2019

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https://doi.org/10.1016/j.urology.2019.07.015
0090-4295
revealed proximal bulbous stenosis (Fig. 2). Further, a retrograde urethrogram and simultaneous antegrade cystourethrogram indicated a stenosis located between proximal bulbous and membranous urethra, with heavily internal prosthesis displacement (Fig. 3). After consultation of an orthopedist, reconstruction of the right pelvis was suggested. However, the patient rejected and preferred to indwell suprapubic catheter eternally. At 1-month follow up, ultrasonography revealed bilateral ureteral distension and hydronephrosis were disappeared.

Bladder outlet obstruction (BOO) is a common urological condition. However, to date, there is no report on BOO which was induced by the compression of displaced hemipelvic prosthesis. We presented the first case. These images help to increase awareness of BOO as a late complication of pelvic reconstruction.

Reference

Figure 2. Urethroscopy. (A) Normal lumen in the anterior urethra; (B) a constriction ring exited in the proximal bulbous urethra; (C) luminal narrowing prevented forward pass of the urethroscope.

Figure 3. Retrograde urethrogram and simultaneous antegrade cystourethrogram. (A) Anteroposterior film showed severely internal displacement of hemipelvic prosthesis; (B) oblique urethrogram showed stenosis located at the membranous and proximal bulbous urethra.