

Acute Urinary Retention Due to Late Migration of a Retained Bullet to the Urethral Meatus



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Urethral obstruction due to retained bullets migrating into the genitourinary system has rarely been reported. The literature describes 2 main methods of retained bullet removal from the genitourinary system: (1) spontaneous expulsion during voiding and (2) manual extraction due to urethral obstruction causing acute urinary retention. We present a case in which a 21-year-old man presented with acute urinary retention 3 years after suffering a gunshot wound to the abdomen. A retained bullet eroded through the bladder wall, migrated through the bladder and urethra, and eventually became lodged in the external urethral meatus, causing obstruction and urinary retention. *UROLOGY* 129: e6, 2019. © 2019 Elsevier Inc.

A 21-year-old male presented to the emergency department complaining of inability to urinate for 12 hours. The patient's medical history was significant for a gunshot wound to the abdomen 3 years prior, during which he underwent an exploratory laparotomy with end colostomy, along with a bladder repair. A known residual bullet was located in the right ischium, confirmed by pelvic X-ray at that time (Fig. 1A).



Figure 1. (A) X-ray of the pelvis showing a bullet located in the right ischium after gunshot wound, 3 years before presentation. (B) Repeat imaging after removal of the bullet, showing absence of foreign body.

During the current presentation, physical examination revealed a visible bullet plugging the urethral meatus (Fig. 2A). Forceps were used to gently remove the foreign body from the distal tip of the urethra. Voiding cystourethrogram (not pictured) did not show any evidence of leak in bladder or urethra. A follow-up abdominal X-ray noted absence of the foreign body, signifying interval removal of the bullet (Fig. 1B). Inspection of the foreign body revealed a fragment of a bullet (Fig. 2B).

Migration of a bullet into the genitourinary tract to the urethral meatus is an unusual finding, and is especially rare when it causes acute urinary retention.¹ These images help to increase awareness of urethral obstruction and urinary retention as a late complication of a retained bullet in the abdomen or pelvis.

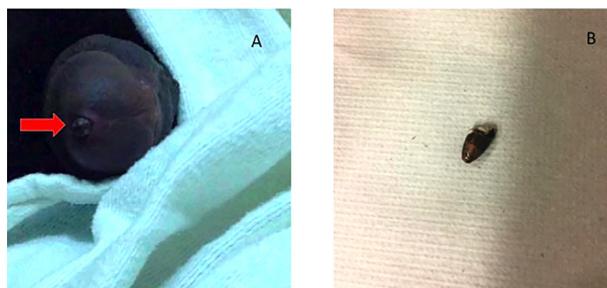


Figure 2. (A) Bullet lodged at the urethral meatus. (B) Fragment of the obstructing bullet after removal from the urethral meatus.

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