



## Delayed Presentation of Urethro-Cavernosal Fistula After Urotrauma

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<b>OBJECTIVE</b>	To define clinical features and surgical management of urethro-cavernosal fistulas (UCF).
<b>METHODS</b>	A literature search was performed using PubMed to identify publications with the key word urethro-cavernosal fistula.
<b>RESULTS</b>	We herein describe surgical techniques and long-term outcomes for UCF repair.
<b>CONCLUSION</b>	UCFs is a rare urological condition with only 9 cases reported to date. UCFs can be diagnosed with careful history, physical examination, and retrograde urethrography. Surgical management includes basic tenets of fistula repair, including adequate mobilization, tension-free but watertight approximation, multilayered closure with nonoverlapping suture lines, and maximal bladder drainage. UROLOGY 131: e7–e8, 2019. © 2019 Elsevier Inc.

A 26-year-old male presented after saddle injury with urinary retention and blood at the urethral meatus. Retrograde urethrogram demonstrated contrast extravasation at the bulbar urethra (Fig. 1). Initial management included cystoscopy guided ure-

thral catheter. The patient presented 18 days later with pulsatile bleeding associated with morning erections. Intraoperative cystoscopy was concerning for bulbar urethro-cavernosal fistula (UCF, Fig. 2). This was identified via perineal exploration, excised, and repaired primarily in a multilayered, tension-free fashion. A pericatheter RUG 1 month after surgical repair showed no extraluminal contrast (Fig. 3). Uroflow 10 months later showed a Qmax 24.1 mL/sec.

UCF is a rare urological condition with few cases described to date.<sup>1-9</sup> It typically has a delayed presentation after proximal corporospongiosal shunts, trauma, or idiopathic etiologies. UCF is diagnosed after careful history, examination, and retrograde urethrogram, though adjunctive cystoscopy or imaging may be useful. Initial



**Figure 1.** RUG demonstrated extra-luminal contrast extravasation without clear corporal body involvement.



**Figure 2.** Cystourethroscopy revealed a well demarcated urethro-cavernosal fistula in the dorso-lateral aspect of the bulbar urethra.

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**Figure 3.** Pericatheter RUG one month after surgical repair demonstrated no evidence of extra-luminal contrast extravasation.

management with maximal urinary diversion is recommended.<sup>2,6,7,9</sup> However, surgical repair should be considered after failure of conservative management and should

follow the basic tenets of fistula repair. This includes adequate tissue mobilization, tension-free but watertight reapproximation, multilayered closure with nonoverlapping suture lines, and maximal bladder drainage. Complete convalescence is achieved after appropriate follow up.

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