

McLaren Delayed Diagnosis of Urethral Straddle Injury



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Introduction

- The urethra accounts for only 4% of all genitourinary trauma.¹
- The bulbar urethra is the most common location of injury and typically results from a straddle type fall or direct blow to the perineum. ¹
- Patients will classically present with a butterfly hematoma, blood at the urethral meatus and an inability to void.¹

Case Report

A 69 year-old male presented to the emergency department 4 days after falling onto a ceramic flower pot and sustaining blunt perineal trauma. Since the incident he experienced severe swelling, pain and ecchymosis throughout the entire groin and upper thighs. He had not urinated since prior to the trauma and had blood in his briefs after the fall. He was evaluated by his PCP the day following injury and sent home with pain medications but no further work-up was obtained. Initial urological work-up revealed a significantly elevated serum creatinine of 10 and an anterior urethral injury with contrast extravasation into the perineum, scrotum and inguinal soft tissues. Primary urethral realignment and catheter placement via cystoscopy was unsuccessful. Urinary drainage was subsequently obtained with CT guided suprapubic catheter placement. The patient had significant improvement after successful urinary drainage with normalization of all labs. He was subsequently discharged home with plans for further evaluation and management to be done outpatient.

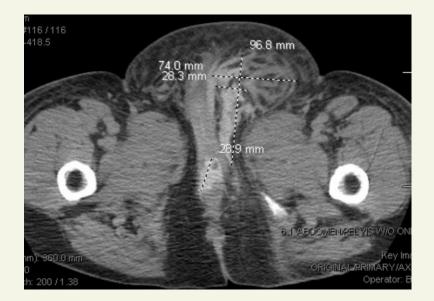


Butterfly hematoma to perineum 4 days after injury



Retrograde urethrogram: Urethral tear with contrast extravasation





CT: Diffuse edema with extravasation into left perineum, scrotum and inguinal soft tissues

Discussion and Conclusion

While it is common for patients to initially present with complications years after partial urethral injuries, patients who are unable to void after straddle injuries to the perineum tend to present immediately. It is important to report this case of delayed diagnosis of a urethral straddle injury to better understand the rare presentation and potential consequences.

Although he presented to his PCP with classical clinical findings of anterior urethral injury after blunt perineal trauma a proper work-up was not performed. Urethral injury is diagnosed by retrograde urethrogram.

Straddle injures require prompt urinary drainage to prevent urinary extravasation. ² Due to the delayed diagnosis our patient had extensive urinary extravasation into the soft tissues with a significantly elevated serum creatinine secondary to reabsorption.

All straddle injuries have a high risk of delayed stricture formation requiring close follow-up. Surveillance includes uroflowmetry, retrograde urethrogram and cystoscopy.³

References

- 1. Martinez-Pineiro L, Djakovic N, Plas E et al: EAU Guidelines on Urethral Trauma. Eur Urol 2010; 57: 791.
- 2. Ku J, Kim ME, Jeon YS et al: Management of bulbous urethral disruption by blunt external trauma: the sooner, the better? Urology 2002; 60: 579.
- 3. Gong IH, Oh JJ, Choi DK et al: Comparison of immediate primary repair and delayed urethroplasty in men with bulbous urethral disruption after blunt straddle injury. Korean J Urol 2012; 53: 569.