

Initial Approaches to Urethral Injury Frederick Clark, Harrison Travis, Joseph Bardot MD, Michael Chandra DO,

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Introduction

- Urethral trauma accounts for 4% of all genitourinary trauma.
- Complications include urethral strictures, impotence, and urinary incontinence.
- American Urological Association Guidelines:

- For both urethral injures associated with pelvic fracture and injuries due to straddle injury, urinary drainage should be established. (Evidence Strength: Grade C).

- For urethral injuries following trauma with pelvic fracture, suprapubic tube (SPT) placement is recommended. (Evidence Strength: Grade C). Primary realignment may be attempted (Evidence Strength: Grade C).

- For uncomplicated penetrating urethral trauma, prompt surgical repair is recommended (Expert Opinion).

• Relative rarity of these injuries has led to few strong studies to guide management.

Objective

The purpose of this ongoing study is to examine the different managements of urethral injuries. The goal of this initial step was to compare how clinical practices aligned with AUA guidelines.

This study is a retrospective chart analysis of patients presenting with traumatic urethral injuries to UMC New Orleans. Data being collected include basic demographics, disposition, mechanism of injury, imaging methods, and any initial interventions. 763 patients with trauma to the genitourinary system presenting between January 2016 and December 2022 were identified. Of this group, 47 patients with traumatic urethral injuries were identified. These patients were divided into 2 grouped based upon their mechanism of presenting injury: urethral injuries caused by blunt pelvic trauma (BLUNT, n=31) and injuries caused by penetrating trauma (PENETRATING, n=16). The initial management for each of these patients was then recorded, whether that was placement of a foley catheter alone, placement of a SPT, or primary repair of the injury.

Materials and Methods







Conclusion and Future Directions

A majority of the patients in the BLUNT group received the recommended management of urinary drainage via either SPT or foley catheter. Only half of the patients in the PENETRATING group received the recommended treatment of primary repair. More research is required to determine the reasons for the discrepancies between the guidelines and clinical practice. Future research will focus more specifically on penetrating urethral trauma, which has significantly less evidence for its ideal management when compared with nonpenetrating trauma and demonstrated more inconsistent management.

References

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