

**Urinary and Sexual Dysfunction Following Pelvic Fractures:
A Retrospective Cross-Sectional Study**

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Purpose: Traumatic pelvic fractures are known to be associated with urological injuries and sexual dysfunction. However, accurate estimates of their frequency are lacking and as such they are often overlooked during recovery. The aim of this study was to investigate patterns of urological injury and prevalence of urinary symptoms and sexual dysfunction following pelvic fractures.

Methods: A retrospective cross-sectional cohort study was conducted of male patients treated for pelvic ring fractures at a UK trauma center between 2015 and 2019. Identified patients were administered two questionnaires by telephone: a specially designed questionnaire assessing urinary and sexual dysfunction, and the validated International Index of Erectile Function-5 (IIEF-5) questionnaire diagnosing post-injury erectile dysfunction (ED).

Results: The final sample included 93 eligible patients, of whom 28 patients sustained a urological injury. Patients with pelvic fractures caused by anterior posterior compression (APC) forces were found to be at higher risk of urological injury compared to lateral compression (LC) (relative risk: 2.37, 95% confidence interval: 1.17-4.82, $P = 0.0168$). Of the full sample, 26 patients completed both telephone questionnaires; 18 patients reported having urinary symptoms and 19 patients had sexual dysfunction, including 10 patients diagnosed with post pelvic fracture ED.

Conclusion: Urinary and sexual dysfunction post pelvic fracture was common in our cohort, affecting over half of patients. Patients with APC fractures may be at increased risk of urological injury. Symptoms unfortunately often remain unmanaged in these predominantly young men and have important implications for quality-of-life post injury, calling for proactive collaboration between orthopaedic and urology clinicians.