Urological trauma behind a pelvic injury

Look beyond the fracture and choose the right urinary tract test.

INJURY PRIORITIES / ADULT TRAUMA

Suspected urinary tract injury needs targeted imaging and early coordination between trauma, urology and orthopaedics.

01 Recognise warning signs

Look for visible haematuria, difficulty voiding, flank or suprapubic pain, perineal bruising and blood at the urethral meatus. Consider mechanism and associated pelvic injuries. Document urinary findings during the initial assessment and subsequent reviews.

02 Assess the upper tract

In stable patients with suspected renal injury, multiphase contrast CT helps define injury and urinary leakage. Physiology determines urgency. Monitor selected non-operative injuries and reassess falling haemoglobin, fever, worsening pain or a persistent urine leak.

03 Image the bladder properly

Visible haematuria with pelvic fracture is an indication for cystography. CT cystography requires active retrograde bladder filling. A routine abdominal CT or passive filling from excreted contrast does not reliably exclude bladder rupture.

04 Protect the urethra

Suspected urethral injury warrants prompt urological assessment and appropriate urethrography or endoscopic evaluation. Avoid repeated blind catheter attempts. Agree a safe drainage strategy and document injuries that may affect later pelvic surgery or reconstruction.

WATCH POINT Absence of haematuria does not exclude every significant urinary injury. Do not delay resuscitation or haemorrhage control for urinary imaging.

DISCUSS WITH THE TEAM

Does the planned scan actually test the suspected injury, and who will establish safe urinary drainage?

READ THE SOURCES

[1] EAU Urological Trauma guidelines: renal, bladder and urethral assessment.
[2] ACS: Genitourinary Injury Management, diagnostic imaging and urethral injury.

Educational summary for clinicians. Apply local protocols and patient-specific judgement.