Medical & Surgical Urology
ISSN: 2168-9857
OPEN ACCESS Freely available online
Perspective

Urological Emergencies: Recognition and Immediate Management

Yury Glotov*

Department of Urology, Moscow State University, Moscow, Russia

DESCRIPTION

Urological emergencies encompass a range of acute conditions that involve the urinary tract and male reproductive organs. Prompt recognition and immediate management are important to prevent severe complications, including loss of organ function, severe infections, or even mortality. Common urological emergencies, their clinical presentations, and the essential steps for their immediate management.

Acute Urinary Retention (AUR)

Acute urinary retention is the sudden inability to urinate, causing severe lower abdominal pain and discomfort. It can result from various causes such as Benign Prostatic Hyperplasia (BPH), urethral strictures, medications, or neurological disorders.

Bladder catheterization: Immediate catheterization is the first-line treatment to relieve the obstruction and decompress the bladder. An indwelling catheter (Foley catheter) or a suprapubic catheter may be used.

Pain management: Analgesics and antispasmodics can be administered to manage pain.

Identify and address underlying cause: After stabilization, investigate the underlying cause to prevent recurrence.

Urolithiasis (Kidney stones)

Kidney stones can cause severe flank pain that radiates to the groin, hematuria, nausea, and vomiting. Pain intensity often fluctuates and is known as "renal colic."

Pain control: Administer NSAIDs or opioids for pain relief.

Hydration: Encourage oral or intravenous fluids to promote stone passage.

Anti-emetics: For nausea and vomiting management.

Further intervention: Larger stones may require urological intervention such as Extracorporeal Shock Wave Lithotripsy (ESWL) or ureteroscopy.

Testicular torsion

Testicular torsion occurs when the spermatic cord twists, cutting off blood supply to the testicle. It presents with sudden, severe scrotal pain, swelling, and sometimes nausea and vomiting. The affected testicle may appear higher than usual in the scrotum.

Urgent surgical intervention: This is a surgical emergency. Detorsion and orchiopexy (fixing the testicle to prevent recurrence) should be performed within 6 hours to save the testicle.

Manual detorsion: In some cases, manual detorsion can be attempted but should not delay surgical intervention.

Acute pyelonephritis

Acute pyelonephritis is a bacterial infection of the kidneys, presenting with flank pain, fever, chills, nausea, and vomiting. It often follows a Urinary Tract Infection (UTI).

Antibiotics: Start broad-spectrum intravenous antibiotics promptly. Tailor based on culture results.

Hydration: IV fluids to maintain hydration and promote urinary output.

Pain management: Analgesics for pain relief.

Severe cases: Hospitalization may be required for severe cases, particularly in those with sepsis or underlying comorbidities.

Fournier's gangrene

Fournier's gangrene is a rapidly progressing necrotizing fasciitis of the perineum, scrotum, and genitalia. Symptoms include severe pain, swelling, erythema, and crepitus in the affected area, often accompanied by systemic signs of infection like fever and hypotension.

Surgical debridement: Immediate and aggressive surgical debridement of necrotic tissue is critical.

Broad-spectrum antibiotics: Administer broad-spectrum IV antibiotics covering gram-positive, gram-negative, and anaerobic organisms.

Correspondence to: Yury Glotov, Department of Urology, Moscow State University, Moscow, Russia, E-mail: glotovy@bk.ru

Received: 21-May-2024, Manuscript No. MSU-24-32503; **Editor assigned:** 23-May-2024, PreQC No. MSU-24-32503 (PQ); **Reviewed:** 06-Jun-2024, QC No. MSU-24-32503; **Revised:** 13-Jun-2024, Manuscript No. MSU-24-32503 (R); **Published:** 20-Jun-2024, DOI: 10.35248/2168-9857.24.13.359

Citation: Glotov Y (2024) Urological Emergencies: Recognition and Immediate Management. Med Surg Urol. 13:359.

Supportive care: Intensive care support, including fluid resuscitation and management of septic shock.

Paraphimosis

Paraphimosis occurs when the retracted foreskin of an uncircumcised penis cannot be returned to its normal position, leading to constriction and swelling of the glans.

Manual reduction: Attempt manual reduction by compressing the glans and pulling the foreskin back over it.

Dorsal slit procedure: If manual reduction fails, a dorsal slit may be necessary to relieve the constriction.

Circumcision: Consider circumcision after acute management to prevent recurrence.

Priapism

Priapism is a prolonged and painful erection lasting more than 4 hours, unrelated to sexual arousal. It can be ischemic (low-flow) or non-ischemic (high-flow).

Ischemic priapism: Aspirate blood from the corpora cavernosa, then inject a sympathomimetic agent (e.g., phenylephrine) directly into the corpora cavernosa.

Non-ischemic priapism: Usually less urgent but requires urological consultation. Observation and ice packs may be sufficient.

CONCLUSION

Timely recognition and immediate management of urological emergencies are vital to prevent irreversible damage and improve patient outcomes. Healthcare providers should maintain a high index of suspicion and be adept at initiating appropriate interventions swiftly. Early consultation with a urologist is recommended in complex cases to ensure specialized care and optimal patient management.