
به نام خدا
Niator . com

تروما های دستگاه ادراری تحتانی

- دکتر حمید شافی
- متخصص ارولوژی ، فلوشیب آندویورولوژی
- استاد دانشگاه علوم پزشکی بابل

- بیمار آقای 32 ساله ایست که بعلت شکستگی لگن ، خونریزی ادراری و هماتوم پرینه و عدم تخلیه ادراری مراجعه نموده است. برخورد تشخیصی و درمانی شما با این بیمار چگونه است؟

1) stable کردن بیمار و معاینه بالینی

2) اورتراگرافی رتروگراد

3) پارگی کامل مجرا
پارگی پارشیل مجرا
مجرای سالم

سیستوگرافی

بهترین اقدام Imaging آن CT Cystography می باشد .

- پارگی اینترا پریتونئال مثانه

- اکسترا پریتونئال

Bladder Injury

The urinary bladder is generally protected from external trauma because of its deep location in the bony pelvis. Most blunt bladder injuries are the result of rapid-deceleration motor vehicle collisions, but many also occur with falls, crush injuries, assault, and blows to the lower abdomen. Disruption of the bony pelvis tends to tear the bladder at its fascial attachments, but bone fragments also can directly lacerate the organ. Other important causes of bladder rupture include penetrating trauma, iatrogenic surgical complications, and spontaneous rupture in patients with a history of neuropathic disease, preexisting bladder disease, or prior urologic surgery.

- Bladder injuries that occur with blunt external trauma are rarely isolated injuries—80% to 94% of patients have significant associated nonurologic Injuries
- Mortality in these patients with multiple injuries is usually related to nonurologic injuries and ranges from 8% to 44%
- The most common associated injury is pelvic fracture, which is associated with 83% to 95% of bladder injuries

- Conversely, bladder injury has been reported to occur in only 5% to
- 10% of pelvic fractures Sudden force applied to a full bladder may result in a rapid increase in intravesical pressures and lead to rupture without pelvic fracture.
- Penetrating bladder trauma is also associated with significant nonurologic injuries and mortality rate. Nearly one-half of all bladder injuries are iatrogenic
- obstetric and gynecologic complications are the
- most common causes of bladder injuries during open surgery

Diagnosis and Radiographic Imaging

- Extraperitoneal bladder injury is usually associated with pelvic fracture.
- Intraperitoneal injuries can be associated with pelvic fracture but are more
- commonly caused by penetrating injuries or burst injuries at the dome by direct blow to a full bladder. Appropriate diagnostic imaging is important because of the marked influence on management.
- After blunt external trauma, the absolute indication for immediate
- cystography is gross hematuria associated with pelvic fracture;
- approximately 29% of patients presenting with this combination of findings
- have bladder rupture

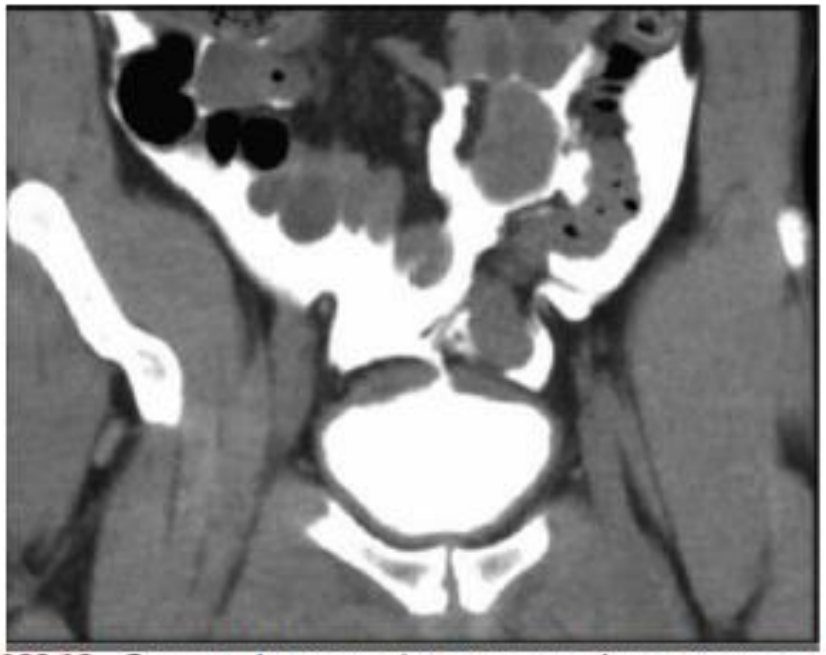
- Relative indications for cystography after blunt trauma include gross hematuria without pelvic fracture and microhematuria with pelvic fracture. The diagnosis of bladder rupture is extremely low in these atypical groups (e.g., 0.6% in patients with pelvic fracture and microhematuria), but the index of suspicion should be raised by associated clinical indicators of bladder injury. Conversely, penetrating injuries of the buttock, pelvis, or lower abdomen with any degree of hematuria warrant cystography.
- If blood is noted at the meatus or the catheter does not pass easily, retrograde urethrography should be performed first because urethral injuries occur concomitantly in 10% to 29% of patients with bladder rupture

Clinical Indicators of Bladder Injury

- Suprapubic pain or tenderness
- Free intraperitoneal fluid on CT or ultrasound examination
- Inability to void or low urine output
- Clots in urine or clots noted in bladder on CT
- Enlarged scrotum with ecchymosis
- Abdominal distention or ileus

- A dense, flame-shaped collection of contrast material in the pelvis is characteristic of extraperitoneal extravasation

- Intraperitoneal extravasation is identified when contrast material outlines loops of bowel and/or the lower lateral portion of the peritoneal cavity



Management

- The usual treatment of uncomplicated extraperitoneal bladder ruptures,
- when conditions are ideal, is conservative management with urethral
- catheter drainage alone
- A large-bore (22-Fr) Foley catheter should be used to promote adequate
- drainage; if output is poor, fluoroscopic cystography should be considered to
- ensure proper catheter placement. Cystography is necessary to verify complete
- healing before catheter removal 14 days after injury. If extravasation persists,
- continuation of urethral catheter drainage is maintained for several weeks, after
- which radiographic confirmation of healing is essential

Indications for Immediate Repair of Bladder Injury

- Intraperitoneal injury from external trauma
- Penetrating or iatrogenic nonurologic injury
- Inadequate bladder drainage or clots in urine
- Bladder neck injury
- Rectal or vaginal injury
- Open pelvic fracture
- Pelvic fracture requiring open reduction and internal fixation
- Selected stable patients undergoing laparotomy for other reasons
- Bone fragments projecting into the bladder

- Penetrating or intraperitoneal injuries resulting from external trauma
- should be managed by immediate operative repair
- When bladder injuries are explored after
- penetrating trauma without preliminary imaging, the ureteral orifices
- should be inspected for clear efflux; ureteral integrity also may be ensured
- by intravenous administration of indigo carmine, methylene blue,
- fluorescein green, or retrograde passage of a ureteral catheter. Any
- penetrating injury involving the ureteral orifice or intramural ureter warrants
- primary closure with stented reimplantation of the ureter and a perivesical drain


پایان
niator.com