

Urology trauma: Dr. Fayer:

* bladder do Not get injured unless it's full and distended

most common cause of hip fracture is penetrating injury of hip fracture

for bladder injury rarely blunt

* bladder is protect by bony pelvis

Diagnosis:

by CT cystogram → Foley catheter → passive
position → lateral
supine

post. voiding picture
something posteriorly.

- in extraperitoneal: seen paracolic areas
retroperitoneum

- in intraperitoneal: contrast go to peritoneal activity shows "Outlining loop of small bowel"
necrotic tissue

ttt: Exploration, debridement, repair and drain

guide U/S drain
for perivesical space by foley cath.
extra peroti. Cath. in pelvis
injury of Rectal or vessel or ureter
injury of the bladder

- whenever there's intraperitoneal injury you need to do exploration.
other injuries → could treat conservative

Complications: cystitis, sepsis, pelvic collection, vesicovaginal fistula.

Urethral injury: type 3
could be partial, complete or contusion.
according to site
ant. (penile + bulbar)
post. (membranous + prostatic)
when inject it with contrast

indication to do it:
1. high ride prostate: do PR and Not feel.
2. bleed per meatus (urethrorrhagia)
inability to put foley cath.
Dx by urethrogram
pt lies supine and lat. for 45° and penis stretch perpendicular to femur

75% of urethral injury is partial

* ant injury: most often due to blunt trauma in pt with "straddle shape fall"

bloody discharge
if buccal fascia is intact → blood limit to penis
if " " " rupture → extend to Colles fascia in perineum if Colles is rupture the blood will extend to scrotum

foley cath. in pt with bleed per meatus "urethrorrhagia"

* post. injury: associate with pelvic fracture
5-10% in male and 1-5% in female

Do Not put foley cath in pt with partial injury
complete tear

* ttt: ant. Contusion may treat Non operative

ttt of post. urethral injury:

Stretch injury and partial tear both best treat with catheter and stent.
(type 1) (type 2)

- In case of complete cut it varies due to Risk of
urethraloplasty or suprapubic cath complete tear
stricture 25%
incontinence 25%
erectile dysfunction 25%

- the problem is the cut of the sphincter due to fracture!

testicular trauma: penetrate or blunt

لازم علاج مع 25% احتمال

75% → do 4/5 to detect the tunica albuginea ^{celo} intact rupture

explore لازم. لو مرضي ذكر الـ 4 وفي hematoma أكثر من 5 سم. فـ explore

Penile fracture: require exploration, evacuate hematoma and close defect in tunica albuginea
happen when penis is erected especially at skeletal phase

Mechanism: disruption of tunica albuginea with corpus cavernosum

Stages: first: sharp pain with popping or cracking sound

second: severe swelling

third: deviation to contralateral side

forth: loss of erection

* could be associate with urethral injury.

bullet or knife ~ 20% → 80% of them is blunt → Not penetrate

Kidney trauma: account for 50% of all genitourinary trauma.

M:F 4:1, in pt with age 5 → 15y. → most c. cause is bicycle riding

- Kidney is well protect by Rib cage, lumbar spine, muscle

immediate late Renal a. cut
bleed

- Children is more prone to kidney trauma due to:

* underdevelop of back muscle and Rib cage

* relative large kidney than adults

* underdevelop of gerotax fascia.

CT with contrast → investigation of choice
Classes of kidney trauma: 5 grades → 24% جرح

ttt: all grades treat conservative except grade 5.

urethral injury: almost penetrate trauma or iatrogenic during pelvic surgery especially hysterectomy
2nd most c. is gunshot
confirm CT initially suspect it when there's fever flank pain paralytic ilues in first 10 days post op.
free fluid of (hydronephrosis) fluid 4/5
in case of complete ligation
intraoperat. retroperot. ureter جرح