AAST Acute Care Surgery Didactic Curriculum

Iatrogenic Urologic Injuries

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Iatrogenic Injuries

Highlights:

- Visual identification is critical to preventing iatrogenic ureter injuries and may be enhanced with retrograde instillation of indocyanine green during robotic cases. Prophylactic ureteral stents may increase the ability to identify injuries in complex cases, but do not reduce the likelihood of injury.
- If identified intraoperatively, repair iatrogenic ureteral injuries immediately. Injuries diagnosed later should be managed with percutaneous nephrostomies or double-J stents for urinary diversion and reconstructed in a delayed fashion.
- Risk factors for external iatrogenic bladder injuries include prior surgery, inflammation and malignancy. Internal iatrogenic injuries occur during transurethral bladder resections and may be identified by visualization of bowel, dark spaces or fatty tissue; or difficulty with cystoscopy -lack of bladder distention, poor return of irrigation fluid or abdominal distention.
- Intraperitoneal injuries and those identified intra-operatively should be repaired primarily.

Testicular Torsion

Highlights:

- *Testicular torsion may occur at any age but seen most frequently within the first year of life and in teenagers, presenting as acute onset scrotal pain with nausea and vomiting and must be differentiated from epididymitis or orchitis.
- Color Doppler ultrasonography is the modality of choice to evaluate patients with scrotal pain. Torsion presents with decreased blood flow to the affected testicle or a “snail or whirlpool” sign when viewing the affected spermatic cord.
- While manual detorsion may be attempted, surgical exploration is the standard of care to evaluate the viability of the testicle and perform an orchiopexy if viable or orchiectomy if ischemic. The contralateral testis should undergo orchiopexy at time of exploration.