

GUIDELINES FOR URETHRAL EVALUATION IN TRAUMA

Approved by the SGH Trauma Committee March 2007

I. PENETRATING INJURIES

Male

A contrast retrograde urethrogram should be performed prior to inserting a Foley catheter in order to exclude injury to the urethra for any penetrating injury involving the penis, scrotum or perineum, following consultation with the on call urologist.

Female

Suspicion for injury based on the close proximity of a penetrating wound to the urethral orifice mandates prompt evaluation by the on-call urologist prior to inserting a Foley catheter.

II. BLUNT INJURIES

Male

A contrast retrograde urethrogram (following consultation with the on call urologist) should be performed prior to inserting a Foley catheter in order to exclude injury to the urethra for blunt injury presenting with **any one or more** of the following:

1. Penile haematoma/ecchymosis/oedema
2. Gross haematuria
3. Blood at the urethral meatus

*Caution should be taken if a displaced pelvis fracture is demonstrated on the pelvis x-ray. A 12 french (or smaller) foley catheter should be advanced gently and slowly. If blood begins to appear the insertion should be ceased and a urethrogram obtained.

Female

Blunt injuries to the much shorter female urethra are rare. These are most often associated with severe open pelvic fractures after blunt trauma when soft tissue lacerations extend into the anterosuperior vagina. If upon careful visual inspection such a laceration is felt to be in close proximity to or involving the urethral orifice, a prompt evaluation by the on-call urologist is mandatory prior to inserting a Foley catheter.

III. TECHNIQUE

The retrograde urethrogram can be easily performed in the trauma resuscitation bay as an adjunct to the secondary trauma survey. The patient is positioned supine while a 16 French Foley Catheter is inserted (using sterile technique) into the urethral meatus just far enough to admit the uninflated balloon (approx 3-5 cm). The balloon is then slowly inflated with 0.5 – 1.0 mL of water using the attached syringe. The balloon should **not** be over-inflated, as this will be painful to the patient and may damage the distal urethra by overstretching the mucosa.

An antero-posterior and an oblique x-ray of the lower pelvis are taken while slowly injecting approx. 20 mL of full-strength urologic contrast material through the catheter using a large urologic syringe. If an injury is excluded on the basis of the study, the Foley catheter can then be fully advanced into the bladder after first deflating the balloon. If an injury to the urethra is diagnosed, the Foley catheter should be removed and the urology service contacted, as the patient will likely require a suprapubic catheter in order to decompress the bladder.

References

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