Key Injury: Pelvis

Strongly consider grouping together chest, abdomen and pelvis for injury-specific imaging (see **Appendix A** for discussion of evidence on *Imaging Chest, Abdominal and Pelvic Injuries*).

a) Pelvic XR (AP)

- If the pelvis is mechanically unstable on initial assessment, or there is concern that occult pelvic injury is present and responsible for occult hemorrhage, a pelvic binder should be applied prior to bedside pelvic imaging
- If CT imaging is anticipated immediately following initial assessment, then plain XR of the pelvis is not indicated on an emergent basis.
- May also be useful to determine if pelvic binding is needed prior to transfer to CT

b) Standard Trauma Imaging CT Protocol:

- The basic set of CT imaging that will most often be used and should be considered the starting point for CT imaging of the severely injured patient
- Includes the pelvis with IV contrast
- Non-contrast CT examinations of the pelvis is considered inadequate unless there is a history of allergy to iodinated contrast and other imaging modalities are not available
- Criteria for the ordering of this standard CT Protocol can be found in **Appendix C**

c) Extended Focused Assessment with Sonography for Trauma (E-FAST)

- E-FAST is not necessary in primary or secondary surveys but if CT not readily available, clinicians should consider E-FAST even in stable patients. (E-FAST is low-cost and clinicians can benefit from maintaining their skill with this modality.)
- If CT is readily available, however, clinicians should forego E-FAST as the latter does not contribute to decision-making.
- Standard E-FAST (see **Appendix F**) to visualize free fluid in the pleural, pericardial, perihepatic, perisplenic, and pelvic locations or pneumothorax in the anterior pleura.
- E-FAST is also useful in triage of multiple severely injured patients simultaneously

d) Delayed Phase CT Imaging of Pelvis

- Generally not necessary
- Consider if patient is hemodynamically unstable and pelvis is suspected to be source of active bleeding
- Delay: 2-5 min. after injection

e) CT Cystogram

- To be used in a clinical setting of suspected bladder rupture, which is usually associated with severe pelvic fractures and hematuria (see **Appendix A** for discussion of evidence on *CT Cystography*)
- If no Foley catheter has been placed by clinician, antegrade with delays through bladder (15-20 min.)
- If Foley catheter has been placed by clinician, can be retrograde
- If tolerable, administer retrograde contrast consisting of either:
  - 300cc iothalamate meglumine injection USP 17.2% (Cysto-Conray®), or
  - 300-500cc mixture of one part Iohexol (Omnipaque 350®) to 2.5 parts water

f) Volume Rendered Reconstructions

- For unstable pelvic fractures
- Can use data already obtained from initial CT