

Trauma Series Radiographs

Background:

- Trauma Series refers to the primary imaging survey as specified by ATLS to support the primary survey physical exam. The HMC process entails a chest radiograph and pelvic radiograph obtained on arrival of major trauma patients in the resuscitation bay (TS 2V, exam code: XRTRAUMA2). A lateral cervical spine radiograph can be added to the TS 2V at the request of the code leader (TS 3V, exam code: XRTRAUMA3).
- This document does not address FAST.

Issues:

- The latest generation of mobile imaging units (FUJI Go, Shimadzu) provide a screen for preliminary review of radiographs prior to images being sent to pacs.
- We have explored options to utilize higher resolution screens at the modality of image acquisition, but these are not feasible nor implemented (JM evaluation Fall 2017).
- Clinical decisions are often made based on the preliminary interpretation on the mobile imaging unit by trauma surgeons and emergency medicine providers.
- This process adjustment aims to guarantee input from Emergency Radiologist in TS interpretation for major trauma activations (full trauma codes).

Workflow:

1. Emergency Radiologist (attending, teaching associate, fellow or resident) is present in trauma bay when exposure for Trauma Series is made in the setting of full trauma activation (red trauma codes). For modified trauma activations or green trauma admissions, radiologists will aim to be present allowing for workload balance.
2. When trauma activation is announced, it will be the ED scheduler's obligation to inform an emergency radiologist of the pending trauma series. Scheduler will tell one of the emergency radiologists when Trauma Code patient has arrived and the scheduler walks into the bay to get the patient sticker: "Dr x, a Trauma code patient is here and Trauma Series is pending in R2B1." One of the radiologists will confirm to the scheduler: "Got it! Thank you!"
3. Radiologist who took responsibility for the TS interpretation will walk into the bay and wait for TS exposure. The radiologist will clarify clinical details with trauma team in resuscitation area.
4. Radiologist will interpret images on mobile xray unit screen (limited technical quality) and report preliminary results to trauma team.
5. Radiologist will check preliminary interpretation on high quality A type monitors in radiology reading area when images become available on pacs. Technologists will

- continue to notify radiologists about trauma series (no change to current flow) in order to let radiologist know that quality check of images is now possible.
6. If new findings are identified on final read of image, radiologist will walk back to trauma bay to update the team. If no additional findings are made, no other communication is necessary.
 7. TS will be dictated in the usual fashion.

Implementation:

- Approved ED CSIC 5/16/2018
- Radiology technologists: Gayden to brief ED
- ED schedulers: Gonzales to brief ED schedulers
- Radiologists: Linnau to brief Emergency Radiology and EM, Trauma Surgery, Robinson to brief Radiology Residents

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