NHS University Hospitals Sussex NHS Foundation Trust

Trauma Imaging and Interventional Radiology

Implemented October 2021

When to scan

CT traumagram is indicated in the context of **significant blunt trauma** if any of the following are present and extend the CT to the feet if significant lower limb trauma:

Vital signs

- Respiratory rate ≥ 30 or ≤ 10
- Heart rate ≥ 120bpm
- Systolic BP ≤ 100mmHg
- Estimated exterior blood loss ≥ 500ml
- GCS ≤ 13

Mechanism of injury

- Fall from height > 3m
- High speed impact ≥ 50km/h combined velocity
- Ejection from vehicle
- Wedge or trapped chest/abdomen

Clinical Features

- Flail chest, open chest or multiple rib fractures
- Severe abdominal injury
- Pelvic fracture
- Unstable vertebral fractures/spinal cord compression
- Fractures of at least two long bones

ED to inform radiologist that scan has been requested

When to embolize

1. Clinical signs and symptoms of injury suggesting a possible solid organ or pelvic injury

2. Obtain a full CT Traumagram and radiologist report
(Radiographer RSCH: 8299/8800, PRH: 6157/8034, Radiologist: 64239)

3. Is there CT evidence of:
   - Hepatic, Renal or Splenic injury with active arterial bleeding or significant haematoma?
   - Pelvic injury (with or without fractures) with active arterial bleeding or significant haematoma?
   - Aortic dissection or transection?

4. Contact the Consultant Interventional Radiologist on call via switchboard and ensure immediate surgical review has been requested

5. The decision to undertake embolization will depend on:
   - Grade and position of injury
   - Patient stability and estimated blood loss
   - Surgical opinion and potential alternative (especially in high grade injuries)

For all transfers of unstable patients refer to prompt '**Pre-transfer Checks**', involve Anaesthetics if required

Lead: J Chan, D Bootland Prompt card by: J Castle Version 6.0 Review: October 2023