





REMARKS

1 General

- 1.1 It is the clinical condition of the patient that determines whether imaging is required or not.
- 1.2 Patients discharged from accident and emergency department after head injury should be given advice in verbal and written formats, which is also to be shared with their families and carers.

2 Plain radiograph

- 2.1 Normal skull x-ray (SXR) does not exclude intracranial pathology.
- 2.2 SXR is only useful for imaging for calvarial fractures, penetrating injuries and suspected radio-opaque foreign bodies.

3 CT

- 3.1 Non-contrast CT scan is the imaging modality of choice in evaluating head trauma.
- 3.2 In most cases, CT alone is sufficient to end the diagnostic imaging work up.
- 3.3 Early and repeated CT scanning may be required for further evaluation when there is deterioration (especially in the first 72 hours after head injury), to detect delayed haematoma, hypoxic-ischaemic lesions or cerebral oedema.

4 MRI

- 4.1 MRI is inappropriate as first line study in acute head trauma.
- 4.2 MRI is valuable as a problem solving tool in selected cases, such as in the following settings:
 - 4.2.1 Hypoxic-ischaemic encephalopathy
 - 4.2.2 Brain stem contusion (haemorrhagic / non-haemorrhagic)
 - 4.2.3 Diffuse axonal injury
 - 4.2.4 Small subdural haematoma

REFERENCES

1. National Institute for Health and Care Excellence (2014) Head Injury: assessment and early management. NICE guideline (CG176).
2. Shetty VS, Reis MN, Aulino JM, et al. ACR Appropriateness Criteria® Head Trauma. Available at <https://acsearch.acr.org/docs/69481/Narrative/>. American College of Radiology. Accessed 2017 April 4.