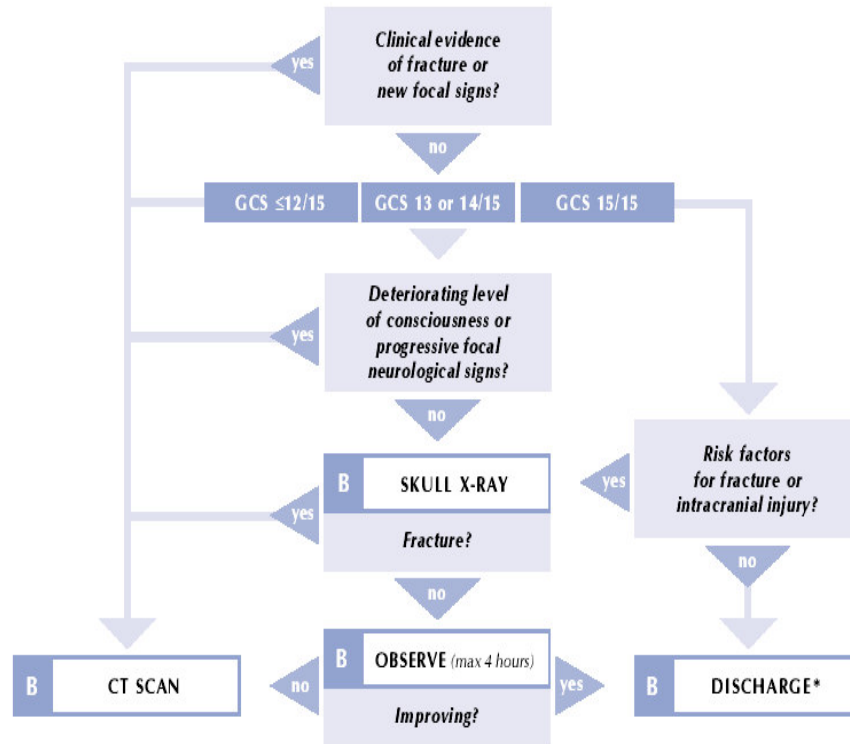


INDICATIONS FOR IMAGING



* Patients who have had risk factors for intracranial injury should not be discharged until they fulfil the criteria for discharge from a ward. Further observation is needed for some patients even if consciousness has returned to normal.

INDICATIONS FOR NEUROSURGICAL OPINION

- CT shows a **recent intracranial lesion**
- Patient fulfills the criteria for CT scan but this cannot be done within an appropriate period
- **Persisting coma** (GCS score 8/15 or less) after initial resuscitation
- **Confusion** which persists for more than 4 hours
- **Deterioration in level of consciousness** after admission
- **Progressive focal neurological signs**
- A **seizure** without full recovery
- **Depressed skull fracture**
- **Definite or suspected penetrating injury**



In children, significant intracranial injury occurs more frequently in the absence of a skull fracture than in adults. Clinical features (e.g. tense fontanelle) are an equally important factor in determining the need for CT scan.

ADMISSION OR DISCHARGE?

- B** A patient should be **admitted to hospital** if:
- **level of consciousness is impaired** (GCS <15/15)
 - **the patient is fully conscious but any of the following risk factors are present:**
 - continuing amnesia (≥ 5 minutes after injury)
 - continuing nausea and/or vomiting
 - a seizure at any time after injury
 - focal neurological signs
 - irritability or abnormal behaviour
 - clinical or radiological evidence of recent skull fracture or suspected penetrating injury
 - an abnormal CT scan
 - severe headache or other neurological symptoms
 - **the patient has significant medical problems** (e.g. anticoagulant use)
 - **the patient has social problems or cannot be supervised by a responsible adult.**

- ☑ Patients and carers should be given verbal and written advice and encouraged to seek prompt advice from their GP or A&E department by phone about any worrying symptoms or other concerns.



Children should be admitted if any of the following risk factors apply:

- history of loss of consciousness
- neurological abnormality, persisting headache or vomiting
- clinical or radiological evidence of skull fracture or penetrating injury
- difficulty in making a full assessment
- suspicion of non-accidental injury
- other significant medical problems
- not accompanied by a responsible adult or social circumstances considered unsatisfactory.

INDICATORS OF NEUROLOGICAL DETERIORATION

- Development of agitation or abnormal behaviour
- Sustained decrease in conscious level of at least one point in motor or verbal response or two points in eye opening response of the GCS
- Development of severe or increasing headache or persisting vomiting
- New or evolving neurological symptoms or signs, e.g. pupil inequality or asymmetry of limb or facial movement