

Use the criteria below for admitting patients to hospital following a head injury:

- Patients with **new, clinically significant abnormalities on imaging**
- When a patient has indications for CT scanning but this cannot be done within the appropriate period, either because CT is not available or because the patient is not sufficiently cooperative to allow scanning
- Patients whose GCS has not returned to 15 after imaging, *regardless of the imaging results*
- Continuing worrying signs (for example, persistent vomiting, severe headaches) of concern to the clinician
- Other sources of concern to the clinician (for example, drug or alcohol intoxication, other injuries, shock, suspected non-accidental injury, meningism, cerebrospinal fluid leak)

Perform and record observations on a half-hourly basis until GCS equal to 15 has been achieved. The minimum frequency of observations for patients with GCS equal to 15 should be as follows, starting after the initial assessment in the emergency department:

Half-hourly for 2 hours. Then 1-hourly for 4 hours. Then 2-hourly thereafter.

Should the patient with GCS equal to 15 deteriorate at any time after the initial 2-hour period, observations should revert to half-hourly and follow the original frequency schedule.

Any of the following examples of neurological deterioration should prompt urgent reappraisal and repeat CT scan immediately:

- Development of agitation or abnormal behaviour
- A sustained (that is, for at least 30 minutes) drop of 1 point in GCS score (greater weight should be given to a drop of 1 point in the motor response score of the GCS)
- Any drop of 3 or more points in the eye-opening or verbal response scores of the GCS, or 2 or more points in the motor response score
- Development of severe or increasing headache or persisting vomiting
- New or evolving neurological symptoms or signs such as pupil inequality or asymmetry of limb or facial movement

In the case of a patient who has had a normal CT scan but who has not achieved GCS equal to 15 after 24 hours' observation, a further CT scan or MRI scanning should be considered and discussed with the radiology department.