

Isolated head injury

(16yr+) Imaging

Name	Addressograph, or	
DOB.		
Unit No./CHI		

- Do not use for Injuries >24 hours old or superficial injuries to face.
- Do not attribute reduced GCS to intoxication with alcohol or substances until significant brain injury is excluded.

GCS Eye: Verbal: Motor: Time of injury:

Patients with the following features should have CT **within one hour of arrival** to ED:

- GCS < 13 at triage
- GCS < 15 two hours after the injury
- Open or depressed skull fracture
- Signs of skull base fracture*
- Post-traumatic seizure
- >1 discrete episode of vomiting
- Focal neurological deficit**

Patients with the following features should receive scan within eight hours **of injury**:

LOC and/or amnesia WITH any of:

- Retrograde amnesia >30 minutes
- Coagulopathy***
- Anticoagulated/clopidogrel
- Dangerous mechanism****
- Age ≥65

*Clear fluid from ears/nose, bleeding from ears, black eye(s) without local trauma, Battle's sign

**Difficulties Speaking/reading/writing/walking, abnormal reflexes/sensation/balance, weakness, visual loss,

***Includes platelets below 100, haemophilia, Cirrhosis, or other bleeding disorders,

****Pedestrian vs. cyclist or motor vehicle, ejection from motor vehicle, fall >1m or >5 stairs

UPDATE 2023: Do not scan patients from triage solely because of anticoagulation/clopidogrel

(Consider scanning and/or admission in patients with risk factors (pre-existing cognitive impairment, other injuries, No supervision, cause of incident, risk of further falls). For other patients use shared decision making if discharging without a scan (d/w ST4+).

ACTION AT TRIAGE:

1. If any clinical features above present at triage then speak to Dr to order CT head
2. The care provider should phone 23797 immediately after requesting the scan .

Refer to head injury pathway for further management

Assess the Cervical Spine as per C-spine imaging guidelines

Patients in ED: Observation and Discharge

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- Use this for patients who have been identified by the Head Injury Pathway as requiring ongoing observation **within the ED/ED Observation Unit**
- Refer concerning signs or observations to ED senior
- Patients who require >12 hours in ED Observation Unit should be admitted to Neurosurgery (only if abnormal CT **and** ongoing neuro-obs required) or Medicine where there are no further head injury concerns

Observation

- In admitted patients the minimum acceptable neurological observations are: GCS, pupil size and reactivity, limb movements, respiratory rate, heart rate, blood pressure, temperature and blood oxygen saturation. This should be recorded on the ED SHOCK chart.
- Perform and record observations **every 30 minutes** for patients with GCS less than 15. For patients with a GCS score of 15 the minimum observation frequency should be as follows:
 - Half-hourly for 2 hours.
 - Then 1-hourly for 4 hours.
 - Then 2-hourly thereafter.
- Should the patient with GCS of 15 deteriorate at any time after the initial 2-hour period, observations should revert to half-hourly and follow the original frequency schedule
- Refer to NICE CG176 (Head Injury: assessment and early management) for full guideline on observations

Admission

- Abnormal CT not requiring DCN admission
- GCS<15 (altered baseline in dementia)
- Severe headache
- Persistent vomiting
- Significant drug or alcohol intoxication
- Ongoing post traumatic amnesia
- Meningism, CSF leak
- Unsafe home circumstances

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Discharge

- GCS 15
- Normal scan or CT not indicated
- Not significantly intoxicated
- Not meeting admission criteria
- Appropriate supervision in place for next 24 hours **or** risk of late complication deemed negligible by ED senior (ST4+)

If patients are appropriate for Nurse-Led Discharge

using the above criteria then this should be clearly stated in the patient's EPR and communicated to the ED Observation Unit nurse