Isolated head injury (16yr+) Imaging

Addressograph, or

Name

DOB.

Unit No./CHI

NHS Lothian

- **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 <u>of arrival</u>** 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 **<u>of injury</u>:**

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 Dr can phone 23797 immediately after requesting to see if slot available.

Refer to head injury pathway on EMIBANK for ongoing management

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 / Discharge

- 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

- 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