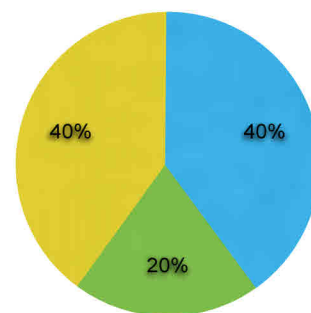


Head Injury

History: This patient has suffered a Head Injury

Task: Assess the patient a determine need for investigations and formulate a management plan.



● history ● communication ● clinical

Marking criteria	Not Completed	Partially Completed	Completed
Washes hands, introduction			
Uses a ABCDE approach during primary survey			
Asks for history of events, uses all resources available (patient, witnesses, Ambulance PRF, nursing notes)			
Assess Airway and manages appropriately including need for cervical spine control +/- immobilization			
Assess Breathing and manages appropriately, including oxygen and BVM ventilation			
Assess Circulation and manages appropriately, including IV access bloods and IV fluids			
Determines most appropriate location to manage the patient and asks for patient to be moved as needed			
Assess Disability using the Glasgow coma scale and determines need for intubation (GCS <8)			
Exposes patient as needed			
Asks for temperature and blood sugar			
Asks for history of events with regard to assessing amnesia of events (if not prior)			
Asks about Past medical history (bleeding disorders)			
Asks about drug history (ie warfarin)			
Asks about social history (safe discharge)			
Assesses CNS and PNS as needed			
Assesses neck			
Assess head wound if present			
Formulates a reasonable and safe management plan including investigation (x-ray, CT) and treatment (tet/tox, wound closure)			
Involves other specialities appropriately			
Discharges patient with head injury advise, and forms safety net as appropriate			
Invites questions, Thanks patient			
Overall			

Head Injury

Level 1 Understanding (basic sciences)

What are the layers of the skull?

Skin, Periosteum, Bone, Dura mater, Arachnoid, Pia mater

What are the anatomical differences between the following types of intracranial bleeds?

Subdural haematoma: between the dura and arachnoid mater

Extradural haematoma: between the dura mater and the skull

Subarchnoid haemorrhage: between the arachnoid and pia meningeal layers

Diffuse axonal injury: Damage to White Mater tracts

Level 2 Understanding (applied sciences)

What are the NICE indications for immediate CT Head post trauma?

- GCS less than 13 on initial assessment in the emergency department.
- GCS less than 15 at 2 hours after the injury on assessment in the emergency department.
- Suspected open or depressed skull fracture.
- Any sign of basal skull fracture (haemotympanum, 'panda' eyes, cerebrospinal fluid leakage from the ear or nose, Battle's sign).
- Post-traumatic seizure.
- Focal neurological deficit.
- More than one episode of vomiting.
- Amnesia for events more than 30 minutes before impact.

If loss of consciousness or amnesia

- Age 65 years or older.
- Coagulopathy (history of bleeding, clotting disorder, current treatment with warfarin).
- Dangerous mechanism of injury (a pedestrian or cyclist struck by a motor vehicle, an occupant ejected from a motor vehicle or a fall from a height of greater than 1 m or five stairs).

Level 3 Understanding (advanced sciences/management)

What are the emergency department treatments for raised intracrainial pressure?

Raise the Head of the bed to 30 degrees

Ventilate to low normal pCO₂

Maintain cerebral perfusion pressure and prevent hypotension

Mannitol 200ml 20%

Transfer to neurosurgical unit