HEAD INJURY

❖ First resuscitate the patient "ABCD"

Airway	➢ Signs of airway obstruction: 1. **Stridor** (noisy breathing), 2. **Increased respiratory effort** 3. **Cyanosis** (a blue color) 4. **Apnea** (not breathing) • **Always treat the quietest person first**, they are cannot breathe. People who can talk or scream, on the other hand, can breath. Try to open paient's mouth gently to ensure that there is nothing like food particles or blood in his mouth. • If there is something obstructing the airway, use your index and middle finger to clear the airway. • Unconscious patients before they are rolled into the supine or semi-prone position, or the neck is extended, always consider, and if possible exclude, an **associated cervical spinal injury.**
Breathing	• Mouth-to-mouth resuscitation should be started immediately if the patient remains cyanosed or apnoeic after the airway has been cleared. • If there is risk of infection use a face mask, an Ambu bag and oxygen. • Mouth-to-mouth ventilation combined with external cardiac massage may, however, be life saving
Circulation	• If there is a severe external bleeding at the scene: **Try to control the bleeding using pressure to the area using a cloth. Press down with your palms rather than your fingertips.** • Tourniquets should only be used to stop limb bleeding, otherwise do not use it.
Disability "neurological evaluation"	**Use AVPU scale.** Is the patient: 1. **A**lert? 2. Responding to **V**oice? 3. Responding to **P**ain? 4. **U**nresponsive?
Exposure	• It is important to keep the patient **warm**, because an unconscious or immobile patient can rapidly become hypothermic, which exacerbates coagulopathy and acidosis.

❖ Record the Glasgow Coma Scale:

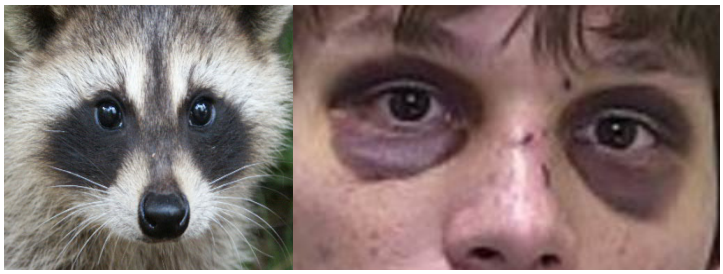
- This is an essential tool in the assessment and management of patients with a head injury.
- Assess the post-traumatic amnesic (PTA) period, which is a good guide to the severity of the injury. This is the time from the accident to the recovery of full orientation. Amnesia for a significant length of time indicates diffuse head injury.
  -Mild PTA: less than 1 hour
  -Moderate: 1–24 hours.
  -Sever: More than 24 hours.

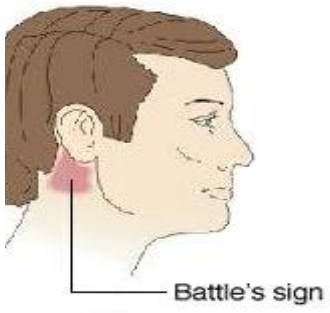
	Patient response	Score
Eye Opening	Spontaneous	4
	To speech	3
	To pain	2
	None	1
Verbal response	Orientated	5
	Confused	4
	Inappropriate words	3
	Incomprehensible sounds	2
	None	1
Motor response	Obeys commands	6
	Localizes to pain	5
	Withdrawal from pain	4
	Abnormal flexion	3
	Extends to pain	2
	None	1

❖ Examination:

- Examine the head looking for laceration and bruising, shaving the hair if necessary
- Look for cerebrospinal fluid (CSF) leaking from the ear or nose. "Rhinorrhea, otorrhoea" This indicates a skull base fracture.
- Look for Hemotympanum "The presence of blood in the tympanic cavity of the middle ear.
- Look for bruising behind the ear over the mastoid process (Battle's sign) reflects a fracture of the middle cranial fossa.

- Look for Bruising around the eyes (the Racoon sign) indicates a fracture of the anterior skull base.





- Examine the wound for foreign bodies.
- Feel around the laceration as a depressed fracture may not be directly under the wound.
- Look for facial asymmetry, as it is cause 7th cranial nerve injury.
- Examine the rest of cranial nerves "because it cause Loss of hearing, smell or vision; or double vision"

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