

Trauma SAQ - Danny

You are working in a rural emergency department (with General Surgery and Anaesthetics services and 90 Km away from trauma centre) on a Saturday evening. A 35 year old previously well male without any allergies, is brought in by ambulance following a motor vehicle accident. He was the restrained driver of a car that skidded in wet weather and struck a tree. His only injury is a strike to the left lateral head.

On arrival he is alert, his pupils are equal and reactive to light but he is amnesic to the events and repeatedly asks staff: what had happened.

His vitals are:

HR - 90

BP - 130/85

SO₂ - 98% on room air.

Temp - 36.5

GCS - 14 (E4, V4, M6).

A single slice of a CT scan of the patient is provided in the PORPS BOOKLET ; Page 5.

- I. State three (3) most important abnormal findings (3 marks).
- A. Moderate left lateral convexity epidural haematoma, measuring 18 mm in maximal depth.
 - B. Associated undisplaced left temporoparietal fracture.
 - C. Mild mass effect - local sulcal effacement and approximately 4 mm of midline shift to the right.
 - D. No hydrocephalus.

Following the CT the patient drops his GCS to 10 (E2, V3, M5). His pupils remain equal. You decide to intubate him.

- II. State five (5) most important considerations when intubating this patient (5 marks)..
- A. Anticipated difficult intubation - in-line immobilisation and collar needed. Get help!
 - B. Neuroprotective intubation -
 - 1. blunt sympathetic response from laryngeal manipulation Fentanyl / propofol etc. (will not accept lignocaine?).
 - 2. Maintain CPP - have metaraminol / vasopressors ready.
 - C. Post intubation neuroprotective care - head at 30 degrees, loose ETT ties, maintain low-normocarbida, normothermia.
 - D. Post RSI care - sedation, fluids, IDC, NGT/OGT. ?Paralysis (qualify why or why not).
 - E. Call general surgeon in - if deteriorates after intubation for burr holes.
 - F. Contact trauma centre / activate HEMS.
 - G. Correct coagulopathy or other AN if exist.

You intubation progresses smoothly and the patient is stable. Due to bad weather, helicopters cannot fly. You decide to transfer the patient by road ambulance to the trauma centre.

- III. List five (5) important steps in preparing for this transfer - 5 marks.
- A. ED cover
 - B. Team - ICU level escort (RN . MICA)
 - C. Equipment - monitor / ventilator / syringe drives
 - D. Drugs / fluids - sedation, emergency

- E. What if deteriorates on route? Verbalise plan
- F. Notifications / Communication - receiving hospital, documentation / CDs, family, etc.

As you prepare to leave, the patient becomes bradycardia (HR 54) and hypertensive (BP - 200/110). Your nurse informs you that the patient's left pupil has become dilated.

IV. State your immediate five (5) actions for his condition (5 marks).

- A. Head up 30° (if not done before)
- B. Hyperventilate
- C. Sedate / optimise.
- D. Mannitol / 3% saline
- E. Call in general surgeon and OT staff if not done before - for immediate burr-hole.
- F. Advise trauma centre / receiving neurosurgeon / HEMS - ?can fly
- G. Family