

## Question 16 (12 marks)

You are the doctor on duty for the retrieval service and are tasked with the retrieval of a patient from a regional Emergency Department to a major trauma centre.

The patient is a 23 year old man who has been involved in a high speed motor car collision.

You are advised of the following information:

- High speed, rollover collision
- Previously well
- No previous medications
- At scene :

BP	70/30	mmHg
HR	160	bpm
RR	40	bpm
O2 Saturation levels	86%	high flow oxygen via Hudson mask
GCS	7	

- Suspected injuries: Head injury, bilateral chest injuries
- Intubated
- Bilateral chest tubes

Most recent observations:

BP	90/30	mmHg
HR	140	bpm
RR	14	bpm
O2 Saturation levels	98%	35% oxygen

- a. List four (4) SPECIFIC safety checks that you would perform on arrival at the regional Emergency Department to ensure airway safety for this patient. (4 marks)
- Secure ETT- firm and intact, tapes not occluding venous drainage
  - Record size and depth of ETT / check position
  - Confirm ETCO<sub>2</sub> trace
  - Orogastric tube placed
  - CXR to confirm position of the tube
  - Philadelphia collar
  - Patency of the ETT e.g. suction airway
  - Check ETT cuff pressure

### Feedback Comments:

Read the question!!! The question is about **airway** safety for **this** patient i.e. a trauma patient. Breathing / Ventilation problems are not airway problems.

- b. Other than oxygen levels, list four (4) SPECIFIC endpoints / aims for your ventilator settings for this patient that you would ensure are present prior to departure for the major trauma centre. (4 marks)
- ETCO<sub>2</sub> trace/ pCO<sub>2</sub>- aim 35- 40 mmHg
  - PEEP < 10 cm H<sub>2</sub>O
  - TV 4- 6 mL/kg
  - PIPS < 35 cm H<sub>2</sub>O

**Feedback Comments:**

- 1) Read the question!!! The questions states “other than oxygen level...”. Some candidates wrote FiO<sub>2</sub> that they would administer
- 2) I did not pay Resp rate unless it was tied to an ETCO<sub>2</sub> level. The aim with the RR is to titrate it to an ETCO<sub>2</sub> level
- 3) With TV, I accepted up to 8 ml/kg

En route to your destination hospital, the patient suffers a cardiac arrest and dies despite advanced attempts to resuscitate him.

- c. List four (4) steps that must be undertaken. (4 marks)
- **Notify police/ coroner (state specific processes differ)**
  - **Leave all lines/ tubes/ monitoring in situ**
  - Preserve any patient clothing in paper bags
  - Notify destination hospital
  - Notify retrieval service
  - Document all medical treatment
  - Notify NOK/ person responsible

**Feedback Comments:**

- 1) The first 2 points had to be listed to get full marks
- 2) Some candidates thought there was someone to blame and suggested an investigation for a “root cause analysis”. While I am sure that the patient would be the subject of an M&M meeting, this is not something that needs to be undertaken at the time of the patient’s death.