

SAQ

Question 1: (17 Marks) 10 Minutes

You are consultant in charge of a suburban Emergency Department on a Friday night. A 33 year old intoxicated man is brought into your emergency department by his mates after an alleged assault at the train station. He is combative and uncooperative in examination. His mates leave soon after they drop him off at the triage. He is bleeding from a laceration to his left eyebrow.

The nurse manages to get his vitals listed below.

HR: 140/min

BP: 70/55 mmHg

RR: 40/min

Sats: 80% on RA

GCS: E4, V4, M5 = 13/15

Pupils: 8mm, Bilaterally equally reacting to light

You are notified by the nurse at triage of his vitals.

(A). List five (5) likely causes for his haemodynamic observation and give one reason for each cause. (5 marks)

1. Tachycardia due to Dehydration secondary to being intoxicated with alcohol
2. Tachycardia secondary to use of sympathomimetics such as methamphetamine or cocaine
3. Reduced GCS secondary to a head injury
4. Hypotension and narrow pulse pressure due to haemopericardium secondary to penetrating injury to chest/heart
5. Tachypnoea and Hypoxia secondary to pneumothorax due to a penetrating injury to chest

Question 1 (continued)

The patient then becomes unconscious & is moved to RESUS, with all the physiological monitoring attached.

b. Describe your next 6 steps in management of this patient. (6 marks)

His observations are:

HR: 140/min

BP: 65/50 mmHg

RR: 40/min

Sats: 80% on RA

GCS: E1, V3, M4 = 8/15

Pupils: 4mm, Bilaterally equally reacting to light

1. Activate Trauma Call
2. Apply cervical collar
3. Expose the patient for a full examination of his torso and perform a log roll
4. Apply oxygen via non rebreather mask
5. POCUS looking for pericardial tamponade, pneumothorax, and intraperitoneal free fluid.
6. Insert 2 large bore IV Cannulas & Commence IV normal saline 1000 ml bolus

Within minutes the patient has cardiac arrest. You diagnose pericardial tamponade as the cause for his haemodynamic deterioration and decide to proceed with an emergency thoracotomy.

c. List the contra-indications for emergency thoracotomy (6 Marks)

1. Blunt injury without witnessed cardiac activity (pre-hospital)
2. Penetrating abdominal trauma without cardiac activity (pre-hospital)
3. Non-traumatic cardiac arrest
4. Severe head injury
5. Improperly trained team
6. Insufficient equipment