

## Case 1 (SCE 1 2010.2)

### SCENARIO

The ambulance has brought in a 65 year-old man with severe dyspnoea. The patient has a history of Chronic Obstructive Airway Disease (COAD), with regular use of bronchodilators. He is still a heavy smoker, but has no other relevant past history.

On arrival, he is sweaty, distressed and peripherally cyanosed.

Vitals signs:

- RR 45/min, with inter-costal recession
- Temp 38<sup>5</sup> deg C
- BP 180/90 mmHg
- Heart rate 125 /min

Upon arrival, arterial blood gases are taken (on 12L / min of O<sub>2</sub>):

|                  |      |        |               |
|------------------|------|--------|---------------|
| pH               | 7.15 |        | (7.35 – 7.45) |
| pO <sub>2</sub>  | 80   | mmHg   | (80 – 95)     |
| pCO <sub>2</sub> | 95   | mmHg   | (35 – 45)     |
| HCO <sub>3</sub> | 42   | mmol/L | (22 – 28)     |
| Base Excess      | +17  |        | (-3 – +3)     |
| SaO <sub>2</sub> | 90%  |        |               |

**Question 1:** Describe and interpret this ABG.

**Question 2:** You opt to treat the patient with BiPAP ventilation, what things would you consider when initiating this therapy.

**Question 3:** Discuss the options for bronchodilator therapy in this patient.

**Question 4: Despite your initial efforts, the patient deteriorated, and required endotracheal intubation. Outline the principles of invasive ventilation in this patient**



## **Case 2 (SCE 2 2010.2)**

### **SCENARIO**

You are on duty at 1800hrs in your ED. Ambulance brings in a 48 year-old man who suffered 2 episodes of large-volume haematemesis, estimated at 500ml each time. He had one episode of melaena.

On presentation, the patient is clammy, with a HR of 120/min and a systolic BP of 85 mmHg.

**Question 1:** Outline the key features in your History and Examination.

**Question 2:** The patient reports a history of longstanding heavy alcohol intake. He takes no regular medications. On examination he is jaundiced with obvious ascites. His initial Hb is 100 g/dL (via bedside measurement). Outline your management.

**Question 3:** Following 2 units of packed cells and 4 units of FFP, the patient's haemodynamic status has improved, and stabilized. The gastroenterology registrar suggests that the patient be admitted for endoscopy on the morning list. Outline your response.

**Question 4:** The patient has a further large haematemesis in the ED, The Gastroenterology service agrees to perform immediate endoscopy. They ask if the ED could assist with performing endoscopy in a resuscitation room as anaesthetic personnel are occupied in theatre. Outline the issues involved in this situation.