# Upper GI haemorrhage:

| Set-up: | |
|---|---|
| Lines/access: | RIJ CVC & left radial arterial line |
| Infusions: | Sedatives, noradrenaline, 1L crystalloid at 80ml/hr |
| Airway: | ETT 8.0, 22 cm at the teeth |
| Ventilator: | PC-SIMV, Pinsp15, PEEP 8, $FiO_2$ 0.45, RR 16 |
| Other: | ITU ventilator, infusions giving sets and pumps<br>ITU charts, admission clerking, bloods yesterday/today, ABG (admission to today with progressive Hb changes) |

## Clinical Setting:

**I:** You are the ICU registrar called by the nurse of the patient in bed 5
**S:** Nurse reports that the lab called, and the patient's Hb is 50. It corresponds to the progressive drop on the ABGs as well.
**B:** 52M who was admitted to ITU yesterday due to type 1 respiratory failure. His blood tests and CXR on admission were suggestive of community-acquired pneumonia and he required intubation due to agitation and hypoxia. He has been presumed to have a PE as well but was not stable enough yesterday to go for a CTPA after intubation and is planned to have one this afternoon instead. He is on treatment dose LMWH in the meantime
**A:** Hb on last ABG 52.
**R:** Called for help

## Potential Clinical Course:

- Initially **A** ETT, **B** $SpO_2$ 95% PC-SIMV, Pinsp15, PEEP 8, $FiO_2$ 0.45, RR 16, good bilateral air entry **C** HR 105bpm SR, BP 110/62 on 0.1 mcg/kg/min noradrenaline **D** Sedated
- During assessment patient's noradrenaline requirement starts to go up
- Patient develops haemorrhagic/hypovolaemic shock
- Massive haemorrhage call needs to be put out
- Gastro team needs to be contacted for urgent OGD

This Simulation Scenario has been written by Dr Simon Stallworthy and formatted by Dr Line Grauslyte, the document has been produced by Dr Melia and approved by the FICM Education Sub-Committee. If you have any queries, please contact FICM via contact@ficm.ac.uk.

The Faculty of Intensive Care Medicine

## Info Sheet For Faculty

- Initial settings:
  - $SpO_2$ 94% on $FiO_2$ 0.45
  - PC-SIMV, Pinsp15, PEEP 8, RR 16
  - $EtCO_2$ 4.5kPa
  - Bilateral air entry
  - HR 105 bpm, SR
  - BP 110/62 on 0.1 mcg/kg/min noradrenaline

- Progress to:
  - $SpO_2$ 92% on $FiO_2$ 0.45
  - PC-SIMV, Pinsp15, PEEP 8, RR 16
  - $EtCO_2$ 4.5kPa
  - Bilateral air entry
  - HR 115 bpm SR
  - BP 90/50 on 0.25 mcg/kg/min noradrenaline

- Progress to:
  - $SpO_2$ 90%  on FiO2 0.45
  - PC-SIMV, Pinsp15, PEEP 8, RR 16
  - $EtCO_2$ 3.5kPa
  - Bilateral air entry
  - Increase HR to 120 bpm SR
  - BP 95/52 on 0.35 mcg/kg/min noradrenaline

- If bleeding managed and blood transfused- patient improves. If no steps taken to replace the lost blood volume- shock progresses to get worse.

This Simulation Scenario has been written by Dr Simon Stallworthy and formatted by Dr Line Grauslyte, the document has been produced by Dr Melia and approved by the FICM Education Sub-Committee. If you have any queries, please contact FICM via contact@ficm.ac.uk.

## Faculty Roles:

Bedside Nurse 1:

- You are a senior ITU nurse.
- You are looking after a 52M with a community acquired pneumonia. Intubated yesterday. Night team mentioned that his Hb has been steadily downtrending on ABGs all night. The lab called to inform you that his Hb is now 50.
- You have escalated this to you SpR.
- You take direction well, and can perform tasks asked if you in a timely fashion
- If asked- you tell the SpR that you have aspirated coffee ground fluid via the NG.

Bedside Nurse 2:

- You are a new starter, first shifts in ITU
- You are keen to help, can perform basic tasks.
- Not familiar with how the massive haemorrhage call works
- Not familiar with advanced ICU procedures and terminology

*HiLLO: 6*

This Simulation Scenario has been written by Dr Simon Stallworthy and formatted by Dr Line Grauslyte, the document has been produced by Dr Melia and approved by the FICM Education Sub-Committee. If you have any queries, please contact FICM via contact@ficm.ac.uk.