

### Pre-transfer Type A dissection:

<b>Set-up:</b>	
Lines/access:	RIJ CVC & left radial arterial line
Infusions:	None
Airway:	Own
Ventilator:	Nasal cannulas
Other:	Syringe drivers Syringes with iv antihypertensive medications Sedatives Airway trolley

#### Clinical Setting:

**I:** You are the ICU registrar on a nightshift

**S:** Outreach/Outliers registrar calls and says that she/he is transferring a hypertensive crisis to the unit straight from the CT scan

**B:** 52M patient, smoker, otherwise fit and healthy presented to A&E 2 hours ago with sudden onset chest pain. Lines inserted while awaiting transfer to CT.

**A:** Normal ECG, awaiting CTPA report

**R:** Called as the patient has just arrived to the unit.

#### Potential Clinical Course:

- Initially **A** own, **B** SpO<sub>2</sub> 92% on 4L NC. **C** HR100 bpm, SR, BP 200/96, **D** awake, oriented, complaining of pain in the centre of his chest
- Starts becoming more tachycardic. If assessed- bilateral upper limb weakness 3/5.
- Radiology consultant on call calls- type A dissection involving ascending aorta, carotid arteries and aortic arch.
- Contact vascular surgeons and tertiary centre – start organising the emergency transfer
- Can call in a second registrar for help
- Continues to stabilize the patient- appropriate infusions and interventions before transfer (short acting iv beta blockers, short acting iv antihypertensives)
- If appropriate blood pressure control not achieved- patient starts to drop blood pressure with rising lactate and dropping Hb.
- Calls the on call consultant for help.

## Info Sheet For Faculty

- Initial settings:
  - SpO<sub>2</sub> 92% on 4L NC
  - RR 18/min
  - HR100 bpm SR
  - BP 200/96
  
- Progress to:
  - SpO<sub>2</sub> 90% on 4L NC
  - RR 20/min
  - HR 110bpm SR
  - BP 210/100
  
- If beta blockers and antihypertensives started:
  - SpO<sub>2</sub> 92% on 4L NC
  - RR 20/min
  - HR 70 bpm SR
  - BP 160/70
  
- If appropriate medications not commenced:
  - SpO<sub>2</sub> 88% on 4L NC
  - RR 28/min
  - HR 120 bpm SR
  - BP to 100/40
  
- Further observations depend upon actions

## Faculty Roles

### Bedside Nurse 1:

- You are a critical care nurse
- You have taken handover from a resus nurse of a patient who is complaining of chest pain. Handed over to you as a hypertensive crisis and was brought to ICU straight from CT.
- The registrar is at the bedside with you.
- You are concerned because the patient looks pale and sweaty, unlike a hypertensive crisis patient.
- You take direction well, and can perform tasks asked of you in a timely fashion
- You are helpful and prompt the candidate 'is there anything else we should do?', 'should I run a gas?', 'has the line been x-rayed and is safe to use?'.

### Bedside Nurse 2:

- You are a new starter – you have never seen someone so hypertensive before
- You are quite startled when asked questions/given directions, requiring instructions to be repeated to you
- If the candidate names equipment using technical terms then you inform them that you don't know what that is; you are also not familiar with the IV medications as you have never used them before
- You are keen to help, but are unwilling to do anything beyond your skill set