

## **Year 4 Emergencies – Candidate instructions**

You have been asked to see Jane Austin who is a 63 year old patient that has been admitted with shortness of breath.

They are currently being assessed by a nurse.

You have 10 mins and you are expected to:

- Perform a A to E assessment, asking the nurse for any history, observations and clinical signs (6 minutes)
- Review the investigations and summarise the case, explaining diagnosis and further management to the examiner (4 minutes)

## Year 4 Emergencies – Patient/Nurse instructions

### Handover information:

Self-presented to OAU.

She has come in today because she has been experiencing some shortness of breath for the last couple of weeks but has got worse now. She also has a cough that is dry for last week or so. Since this morning she has also experienced some chest pain.

PMHx: Small cell lung cancer, high cholesterol, used to smoke 30 a day for 20 years but now stop since last year

DHx: chemo therapy – but can't remember – last one couple of weeks ago

Allergy: None

FHx: Diabetes

SHx: Lives with partner or 40 years. Usually mobile and independent before this.

Systems review: No other symptoms

### A to E assessment

**A: patent**

**B: hypoxic (sats of 88), tachypnoeic (28), trachea central, chest expansion equal but some dull percussion in top right anterior field.**

**C: raised JVP, tachycardia (112), cap refill 4 sec, BP 120/80**

**D: BM normal, GCS 15, chest pain 4/10,**

**E: normal apart from some oedema in the legs**

### Management:

**B: elevation of the head is also important, O2 – for hypoxia, dull percussion due to lung mass**

**C: Should acknowledge raised JVP if not then prompt, this should seal diagnosis and dexamethasone may be given IV – put in cannula**

**Escalation is important as an emergency**

**If O2 not given patient will continue to deteriorate and potentially end up Respiratory failure – if deteriorate the ICU/HDU may need to be involved**

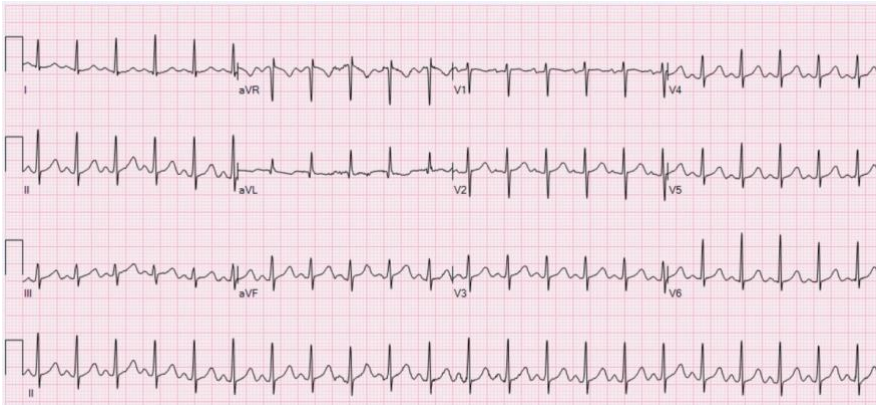
**If dexamethasone not given then diuretics can be considered if laryngeal oedema suspected**

### Investigations:

**Bedside: ABG – results below**

**Bloods: FBC, U&Es, CRP etc – not returned in time for station**

**Imaging: CXR – result below, doppler scanning, CT/MRI**



ABG:

PH: 7.38

PaO<sub>2</sub>: 9.0

PCO<sub>2</sub>: 12

HCO<sub>3</sub><sup>-</sup>: 24

BE: -1

- **pH:** 7.35 – 7.45
- **PaCO<sub>2</sub>:** 4.7 – 6.0 kPa || 35.2 – 45 mmHg
- **PaO<sub>2</sub>:** 11 – 13 kPa || 82.5 – 97.5 mmHg
- **HCO<sub>3</sub><sup>-</sup>:** 22 – 26 mEq/L
- **Base excess (BE):** -2 to +2 mmol/L



Questions:

1. What is the most likely diagnosis?

SVCO

2. What are the management options for this patient?

Radiotherapy and chemo depending on cancer

Anticoagulant may be required when venogram has shown central venous thrombosis

Surgical – stenting and angioplasty (endovascular), sometime bypass

Palliative treatment may be considered if advanced disease

3. Other signs/symptoms of SVCO?

Dilated veins over the arms, neck and anterior chest wall

Cyanosis

Engorged conjunctiva

Convulsions and coma

## Year 4 Emergencies – Examiner marksheet

Washes hand and PPE	
Introduces themselves and checks patient ID	
Good interaction with the nurse	
Systematic A to E assessment	
Appropriate investigations ordered	
Involvement of senior if required	
Reassess	
Correctly interprets investigations	
Good list of differentials	
Correct diagnosis	
Appropriate management	