



# Dyspnoea in Palliative Care

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# Dyspnoea

## A common problem in palliative care

Occurring in 50% of palliative care patients at some stage, especially:

- Chronic respiratory conditions (95% of patients)
- Heart failure (90% of patients)
- Lung cancer (75% of patients)

# Mr GE

Call from paramedic (phone a friend) at 4:30pm on afternoon

## *Profile:*

- 57 year old man at home with his wife
- Wants to die at home

*Past history:* Hepatocellular carcinoma with lung metastases – referred to palliative care, not seen by the team yet

## *Presenting complaint:*

- 2 days of shortness of breath
- Saw his GP yesterday → oral antibiotics
- Got worse → called an ambulance



## *On exam:*

- Struggling to breathe
- On high flow, SaO<sub>2</sub> 64%

## *Plan:*

- “He’s refusing to come to hospital”
- “What do I do?”

*A man with metastatic cancer and 2 days of worsening dyspnoea and SaO<sub>2</sub> 64% not wanting to come to hospital*

What would you do and recommend?



# Managing Dyspnoea In Palliative Care

1 -

Understand the patient's goals AND the likely prognosis – this informs the next steps

Then:

2 - Treat the underlying cause

3 - Manage the symptom

*A man with metastatic cancer and 2 days of worsening dyspnoea and SaO<sub>2</sub> 64% not wanting to come to hospital*

What would you **do** and recommend?

“Is the patient still seeing oncology or gastroenterology?” → No

“Is the patient currently comfortable?” → Yes, much better on high flow

“Are there injectable medications in the house in anticipation for end of life care?” → No

“Why doesn’t the patient want to go to hospital?” → He thinks he’s dying and wants to die at home

*A man with metastatic cancer and 2 days of worsening dyspnoea and SaO<sub>2</sub> 64% not wanting to come to hospital*

What would you do and **recommend?**

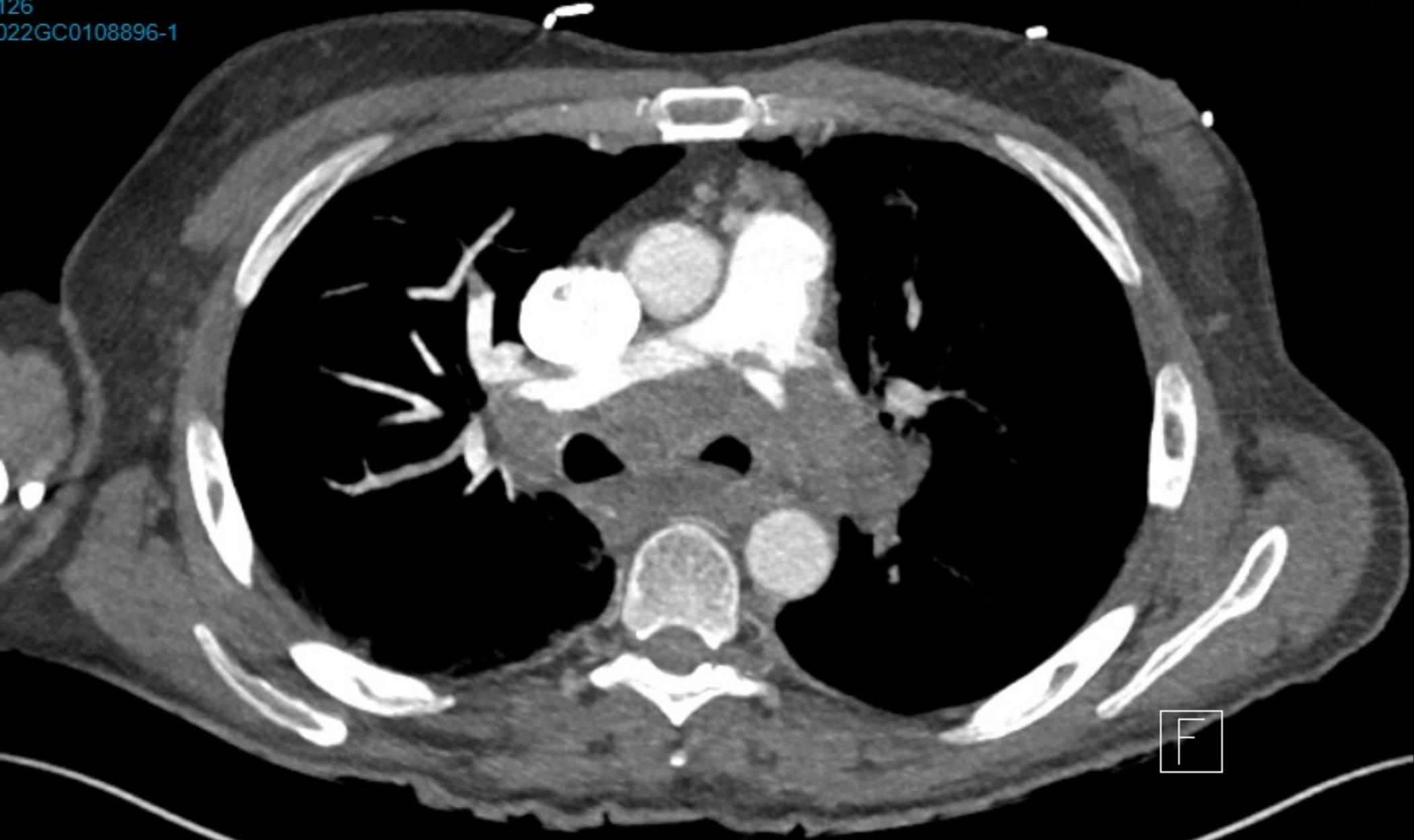
Probably a PE or respiratory infection

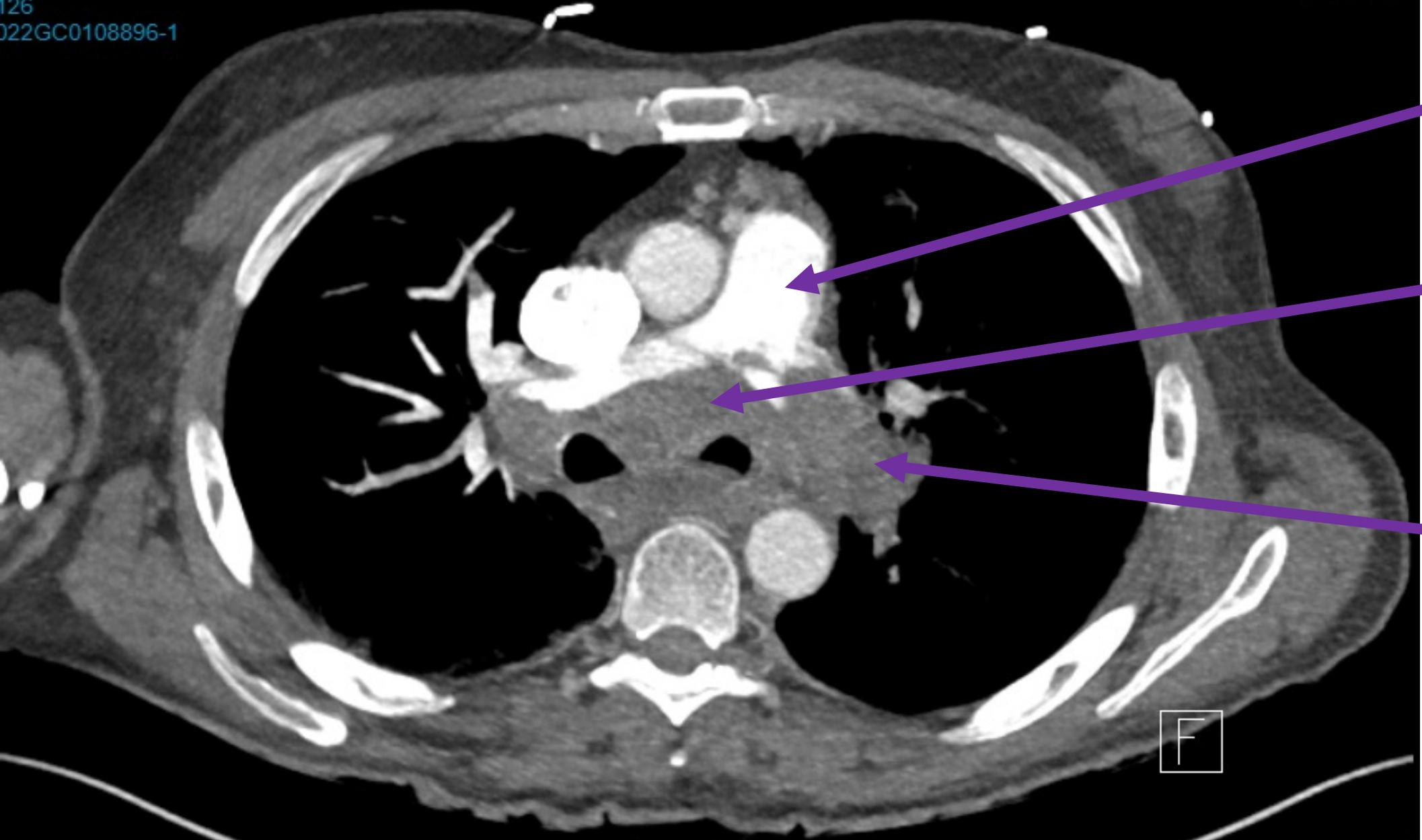
It may be reversible but it's reasonable he wants comfort care only

If we stop the high flow oxygen, he'll be very distressed as he dies

He needs an immediate medical + nursing review and probably a syringe driver

There's no capacity for an immediate review. Can you let the patient know that unfortunately he needs to come to hospital – it's the lesser of two evils





Normal

Tumour

Pulmonary embolism

# Progress

"Acute respiratory distress in context of saddle PE and multiple bilateral PEs with right heart strain"

"Not for anticoagulation due to risk of UGI bleed from oesophageal varices"

"For focus on comfort and dignity"

PRN medications for relief of suffering + syringe driver commenced

Peaceful death 2 days post-admission

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# Common causes of dyspnoea in palliative care

## *Cancer Patients*

- Direct cancer-causes
  - Lung metastases
  - Pleural effusion
  - Lymphangitis carcinomatosa
  - Malignant pericardial effusion
- Complications in cancer
  - Pulmonary embolism
  - Anaemia
  - Atrial fibrillation
  - Pneumonia

## *Non-Cancer Patients*

Chronic obstructive airways disease

Idiopathic pulmonary fibrosis and other interstitial lung diseases

Congestive cardiac failure

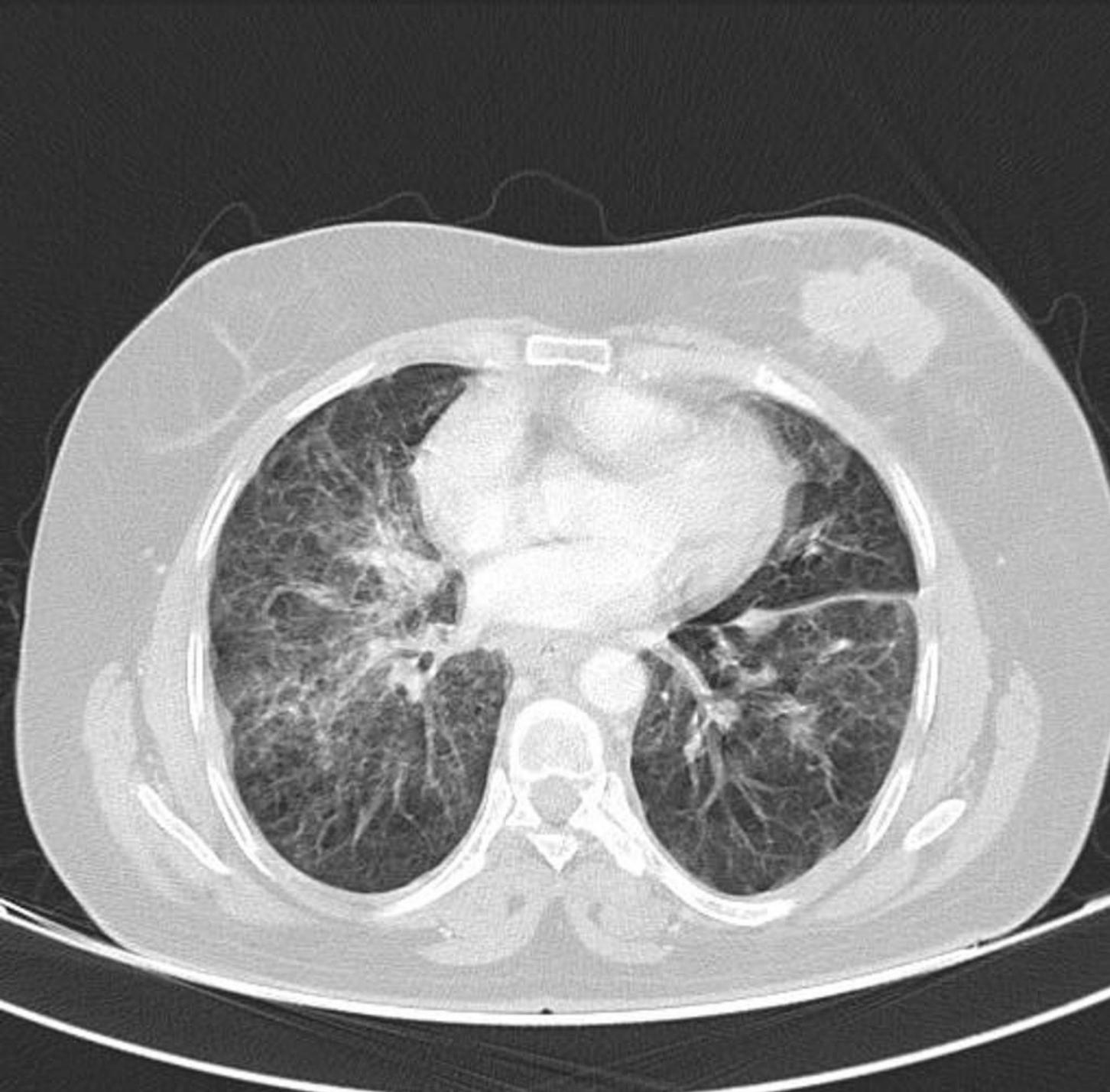
Motor neuron disease



## Multiple lung metastases

*Very few options*

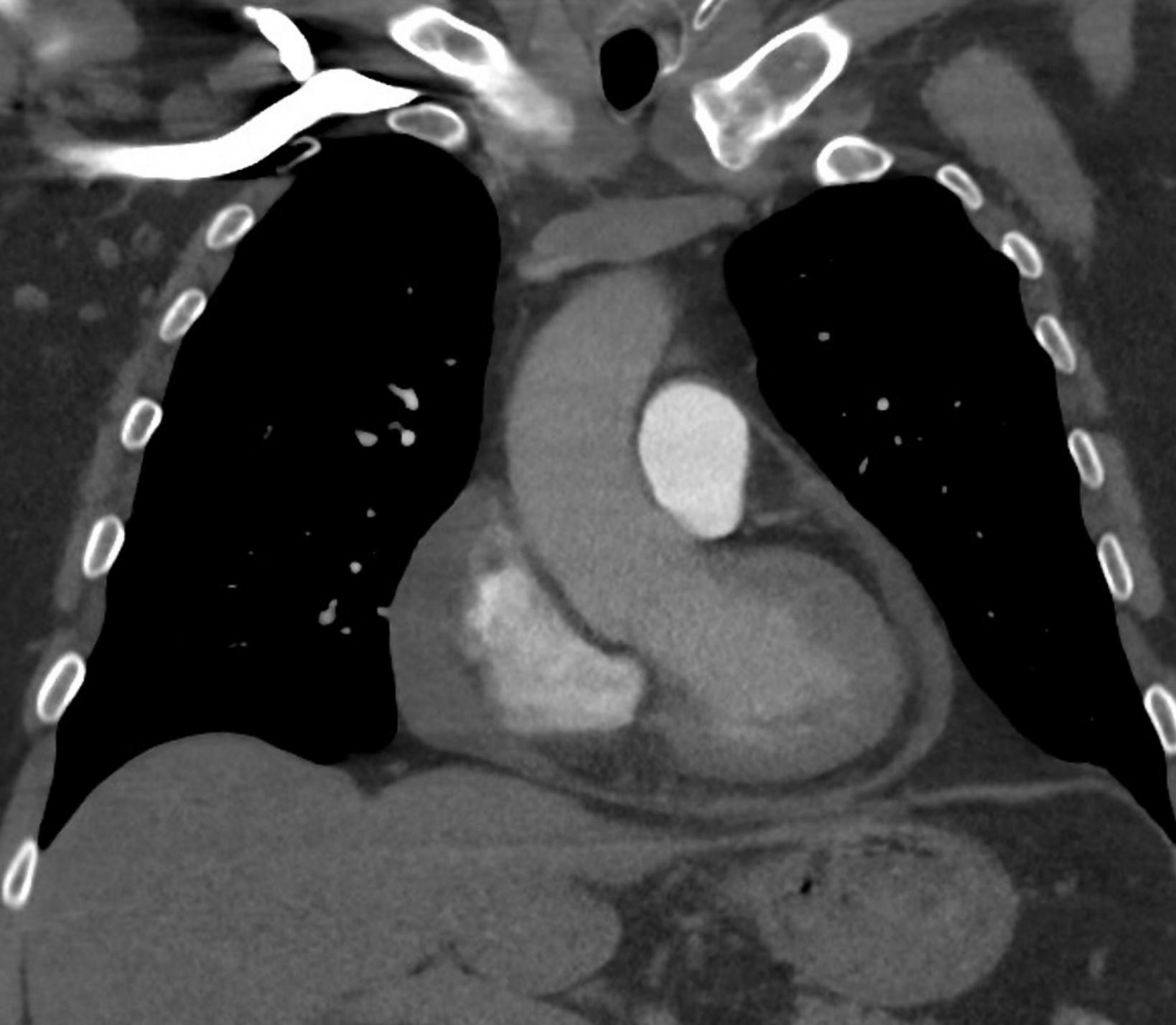
Dexamethasone may reduce peri-tumour oedema



## **Lymphangitis carcinomatosa**

*Very few options*

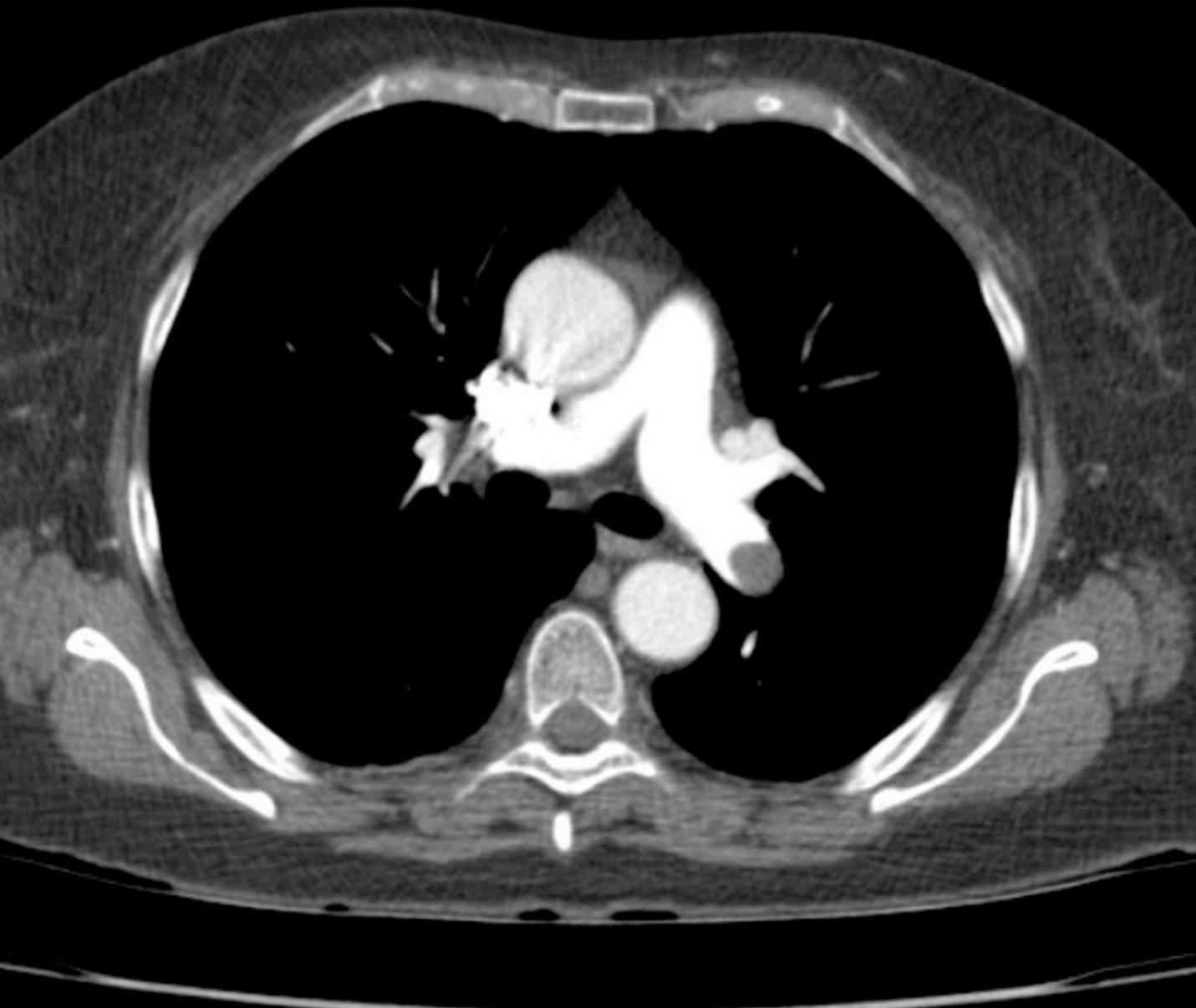
Dexamethasone may  
reduce peri-tumour  
oedema



**Pericardial effusion**

*Possible interventions*

Pericardial drainage



## **Pulmonary embolism**

*Possible interventions*

Anticoagulation

Thrombolysis



## **SVC obstruction**

*Possible interventions*

Steroids

Radiotherapy

Stenting



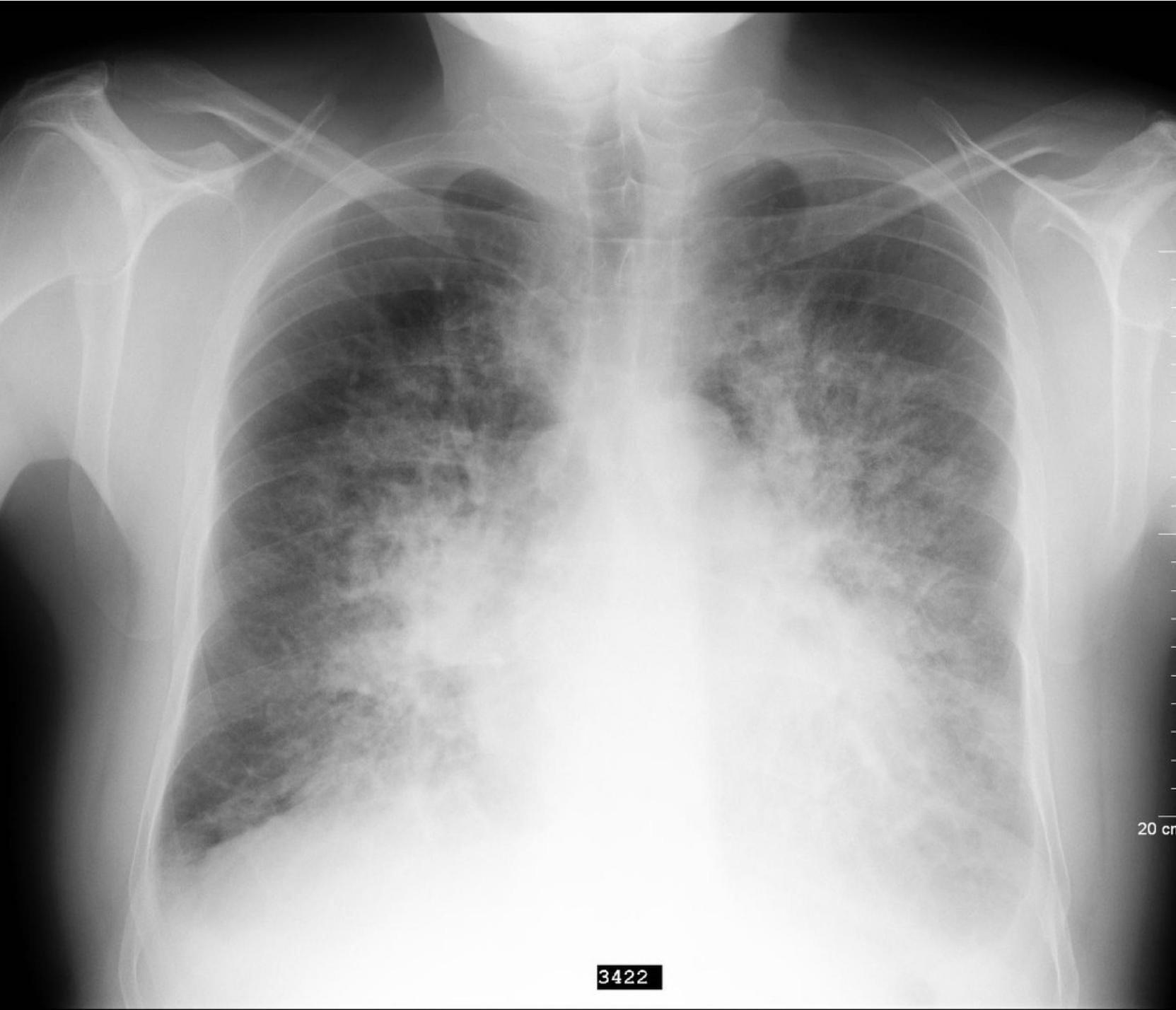
## **Bronchial obstruction**

*Possible interventions*

Steroids

Radiotherapy

Stenting



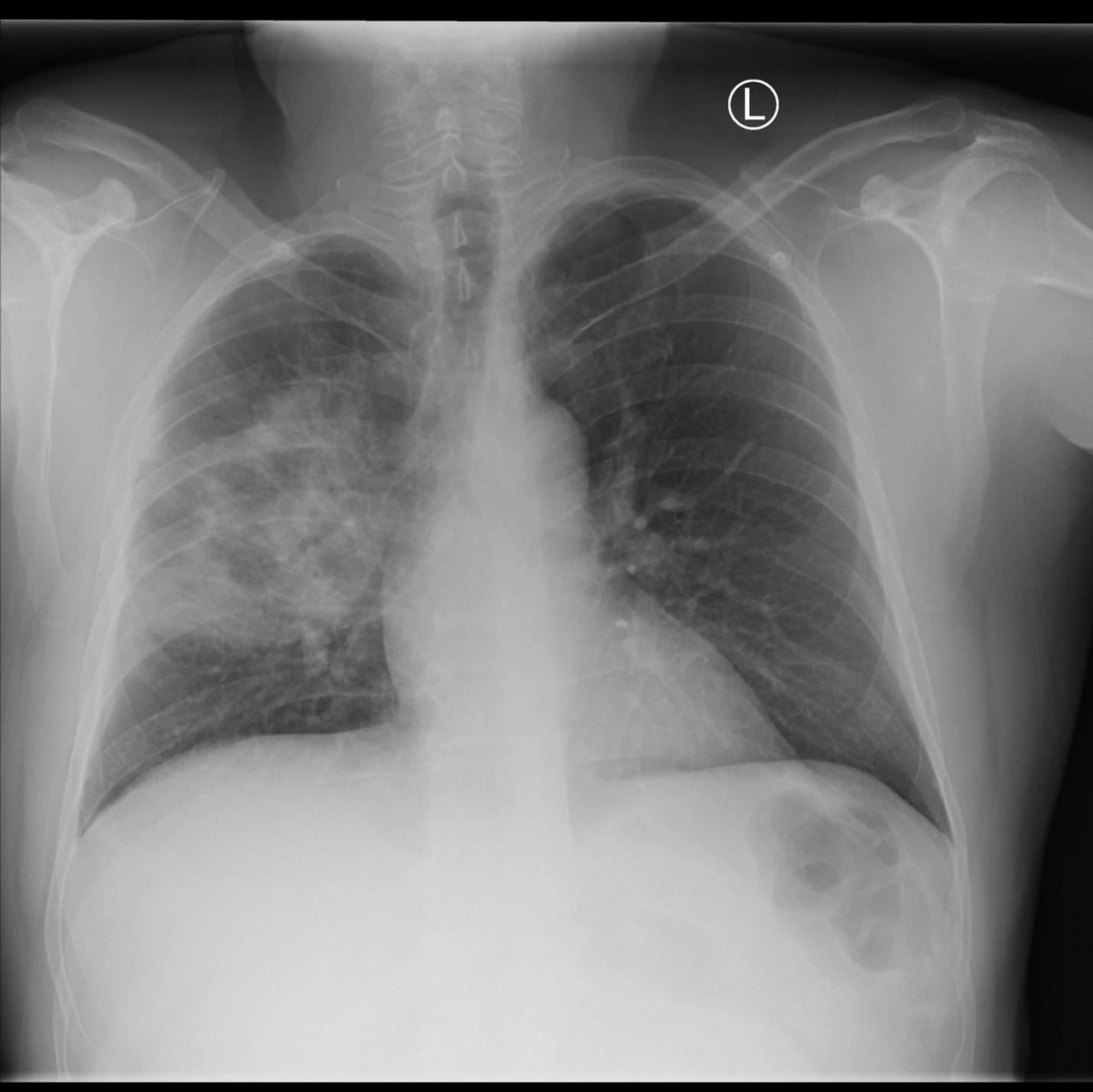
**Left ventricular  
failure with  
pulmonary oedema**

*Interventions include*

Diuretics

Nitrates

CPAP



## **Pneumonia**

*Interventions include*  
**Antibiotics**

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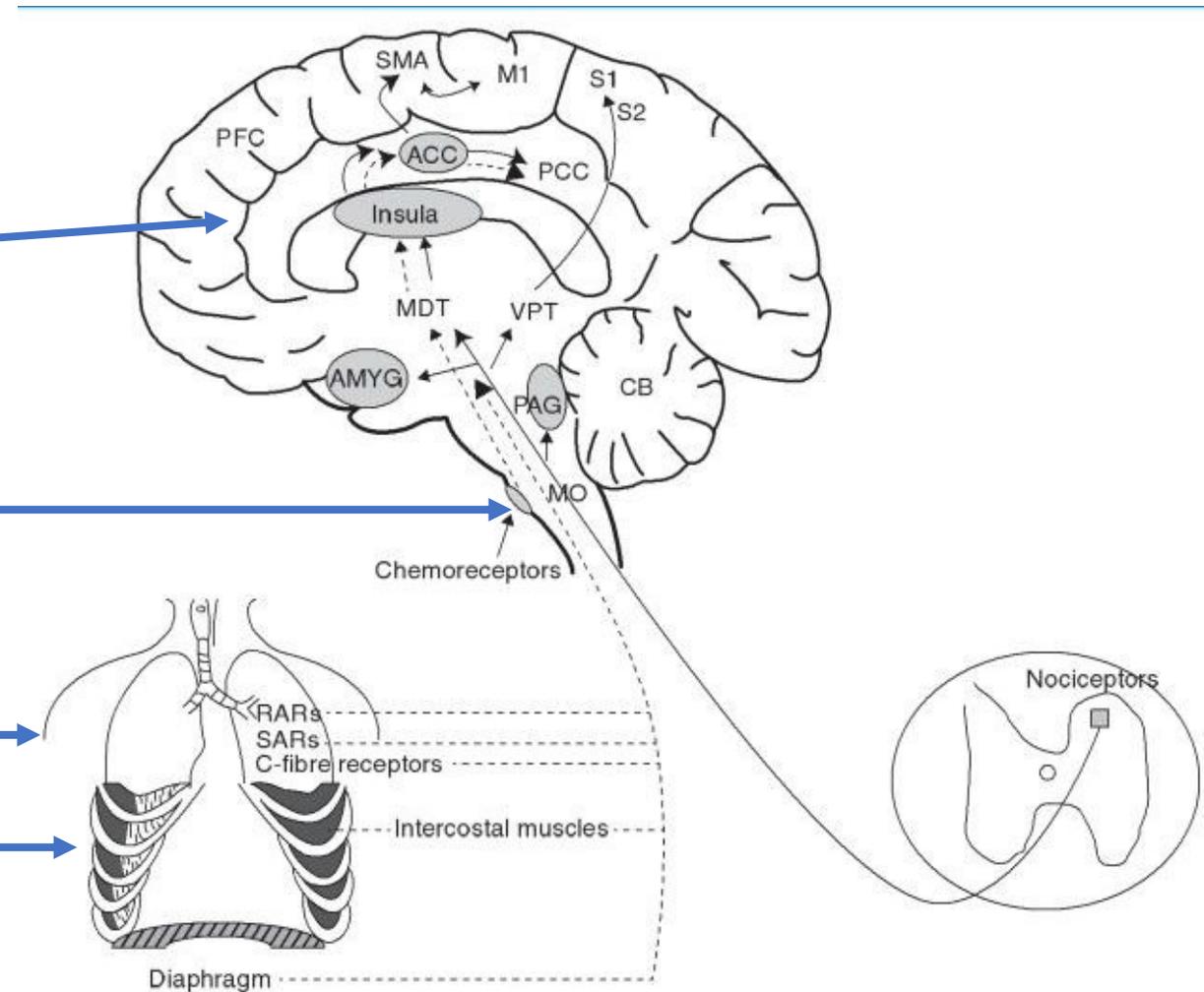
2 - Treat the underlying cause

**3 - Manage the symptom**

# Dyspnoea

Mechanism is complex but involves:

- Increased activity in the respiratory motor command section of the brain
- Increased activity of central chemoreceptors due to hypoxia and hypercapnia
- Increased activity of pulmonary vagal receptors
- Increased activity of chest wall mechanoreceptors of the joints, tendons and muscles
- Anxiety



# Symptomatic Treatment of Dyspnoea

## Non-pharmacological treatments

Allied health, psychology and nursing are invaluable here



Movement of air via fans

Activity modification



Oxygen

Box 1 Joint British Thoracic Society and Association of Chartered Physiotherapists in Respiratory Care (BTS/ACPRC) guidance on positioning to relieve breathlessness<sup>33 35</sup>

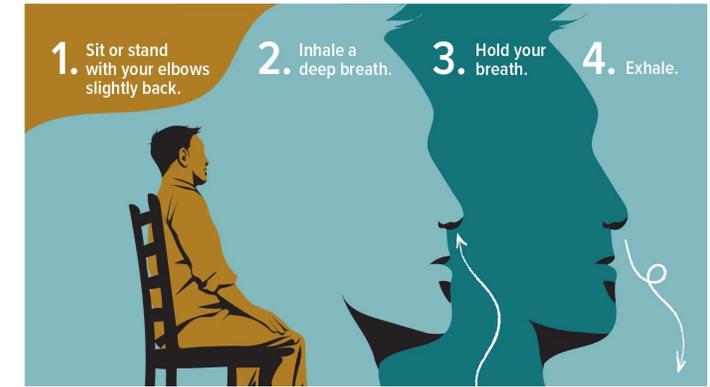


Forward lean 1      Forward lean 2      Adapted forward lean for lying      Adapted forward lean for sitting

Posture



Hi-flow, humidified oxygen therapy



Breathing exercises



Non-invasive ventilation

# Symptomatic Treatment of Dyspnoea

## ***Pharmacological treatments***

Opioids

*For example:*

Morphine SR 5mg oral twice daily +  
Morphine IR 2.5mg oral 2-hourly PRN

Benzodiazepines

*For example:*

Clonazepam drops 3 drops 4-  
hourly sublingually PRN

SSRIs

*For example:*

Nebulized medications including  
opioids

Sertraline 50mg daily

# Severe dyspnoea and end of life care

Can be very frightening (so be liberal with benzodiazepine prescription)

Subcutaneous medications frequently needed, especially

- Opioids
- Benzodiazepines

When removing ventilatory support (e.g. BiPAP in MND)

- Plan to do this when senior medical staff available (e.g. in the morning on a weekday)
- Consider IV access to allow for rapid benzodiazepines

Where a terminal, acute airway obstruction is anticipated (e.g. malignancy compressing the trachea)

- Consider anticipatory IM benzodiazepines (e.g. 10mg IM midazolam 10-minutes)
- Call the emergency team (even though the patient may be NFR / not for MET calls)

Thank you!

Questions?

Comments?