Breathlessness

Is treatment of the underlying illness appropriate?

Are there any reversible causes of breathlessness?

- Cardiac failure
- Pulmonary embolus
- Pneumothorax
- Infection
- Arrhythmia
- Anaemia
- Bronchospasm
- Effusion

Treat if appropriate

Is stridor present?

- Dexamethasone 16mg daily (SC, IM, IV, PO) or 60 mg Prednisolone PO prior to admission
- Seek advice – urgent oncology / ENT surgeon referral

Is superior vena cava obstruction present?

- Dexamethasone 16mg daily SC, IM, IV, PO. Avoid giving steroids after 2pm due to risk of insomnia. Reduce steroids to lowest effective dose once patient has stabilised.
- Seek advice – urgent oncology referral. Consider SVC stent or palliative radiotherapy.

Palliative Care

- Multidisciplinary assessment of the patient is essential
- Anxiety and panic attacks and hyperventilation are common in breathless patients
  - Simple breathing exercises
  - Relaxation training
  - Ask about anxieties and fears and allay where possible
  - Offer written information about living with breathlessness
  - Discuss possible drug management e.g. Lorazepam 0.5 mg prn SL for panic or Diazepam 2mg nocte if more chronic anxiety
  - Non drug management: eg hand held fan
- Consider lifestyle adaptations
  - Discuss limitations and listen to concerns
  - Maximise abilities – energy conservation, breathing retraining
  - Review benefit entitlement (may be eligible under special rules)
  - Consider need for equipment / aids and package of community care
- Consider referral to specialist breathlessness service

Is a trial of steroids appropriate?

Particularly if lymphangitis carcinomatosis, COPD or previous response to steroids. Dexamethasone 4-8mg bd PO.

Stop if no effect within 1 week. If effective reduce dose to lowest effective dose. Do not give after 2pm

Consider trial of nebulised bronchodilators

Salbutamol 2.5-5mg qds +/- Ipratropium 250–500 micrograms qds
Nebulised saline 0.9% may help to loosen retained secretions
**Breathlessness at rest** – drug treatment is more likely to be needed

- Advice on posture / well ventilated room
- **Trial of opioid**
  - Normal release morphine 4 hrly (6-8 hrly if frail)
  - Start with 2.5 mg if patient is opioid naïve
  - Increase dose slowly in steps of about 30% if needed
  - If unable to take oral medication use SC route
  - Start with Diamorphine 1.25-2.5mg SC prn 4 hrly or 5-10mg CSCI/24 hrs
  - In patients already taking morphine for pain relief, increase q4hr dose by 30-50%

- **Trial of benzodiazepine**
  - Diazepam 2mg stat PO. If tolerated prescribe 2-5mg PO nocte. Reduce dose if patient becomes drowsy
  - Alternatively Lorazepam 0.5-1mg SL prn (shorter half life therefore less accumulation than Diazepam)

- **Neuroleptics** have an anxiolytic effect without marked respiratory depressant effects.
  - They are helpful in patients who are anxious and delirious
  - Haloperidol 1.5-3 mg stat + nocte
  - If hypoxic consider trial of O\textsubscript{2} via nasal cannula or mask at 24% (caution in COPD)
  - Increasing breathlessness at rest suggests a short prognosis if no reversible cause can be found

### Management of severe breathlessness in the last days or hours

- Failure to relieve terminal breathlessness is a failure to utilise drug treatment correctly
- Discuss with the patient + family and emphasize that the medication is given with the intent to reduce the distress associated with severe breathlessness
- If patient having difficulty with oral medication → convert oral opioid to SC route (24hr oral morphine dose divided by three = 24 hr diamorphine dose SC)
- Give Midazolam 2.5-5mg for distress SC prn
- Add Midazolam 10-15mg / 24 hrs CSCI. Increase the dose of Midazolam according to the amount of additional prn doses required or according to the level of distress. Some patients may need up to 120 mg Midazolam / 24 hrs
- If greater sedation necessary, add neuroleptic to CSCI
  - e.g. Levomepromazine 12.5-50 mg/24hr

### Management of noisy breathing or secretions

- Changing position may help
- Give Hyoscine Butylbromide 20mg stat and then 80 - 120mg/24 hrs CSCI
- Or Glycopyrronium bromide 300 micrograms SC stat and 600-1200micrograms/24 hrs CSCI
- Or Hyoscine hydrobromide 400 micrograms SC stat and 1200-2400 micrograms/24 hrs CSCI (sedating)
- Suction may be required if patient has copious oropharyngeal secretions

NB Hyoscine butylbromide and Glycopyrronium cause less sedation and confusion than Hyoscine hydrobromide

### References

Davis C. The role of nebulised drugs in palliating respiratory symptoms of malignant disease. European Journal of Palliative Care 1995; 2(1) 9-15