Breathlessness

Introduction
Breathlessness is a common symptom for patients with advanced cancer, chronic obstructive pulmonary disease (COPD), pulmonary fibrosis and heart failure. It can be associated with any combination of physiological, psychological, social and spiritual factors. The impact and distress caused by breathlessness is often underestimated.

Assessment
• Undertake a holistic assessment using a multi-professional approach.
• Ask the patient to rate symptom severity and assess the level of associated distress/anxiety.
• Explore the patient’s understanding of the reasons for breathlessness, fears, impact on functional abilities and quality of life.
• Clarify pattern of breathlessness, precipitating/alleviating factors and associated symptoms.
• Look for any potentially reversible causes of breathlessness, such as infection, pleural effusion, anaemia, arrhythmia, pulmonary embolism, bronchospasm or hypoxia (check oxygen saturation levels using pulse oximeter).
• Determine if treatment of the underlying disease is appropriate. Seek advice if in doubt.
• If in last days of life, refer to Care in the Last Days of Life guideline.

Management¹
• Treat any potentially reversible causes if appropriate.
• Optimise current therapy (non-pharmacological and pharmacological management).
• Acknowledge fear and anxieties and provide supportive care. For example, offer verbal explanation of symptom and written information.

Management of superior vena cava obstruction/stridor
• If stridor or signs of superior vena cava obstruction (SVCO), refer urgently to the appropriate specialist for consideration of, for example, stenting or radiotherapy.
• Give high-dose corticosteroids:
  - dexamethasone 16mg orally or parenterally, or

¹† Indicates this use is off licence
Scottish Palliative Care Guidelines – Breathlessness

Non-pharmacological management

- Consider using a self-management plan, including smoking cessation advice where appropriate. Advise a smoke-free environment.
- Consider using a hand-held fan or opening a window to improve ventilation.
- Enhance coping and functional ability using positioning, relaxation, controlled breathing (such as pursed lip breathing) and anxiety management techniques, and by planning and pacing activities. Consider using a cognitive behavioural approach.
- Maintain activity levels.
- Consider the need for equipment, aids and a package of care.
- Refer to a breathlessness support service (such as pulmonary rehabilitation) depending on prognosis.

Pharmacological management

Opioids:

- Can reduce breathlessness at rest and in the end of life phase.
- Give as a therapeutic trial; monitor patient response and side effects.
- Consider proactive prescribing for constipation, and nausea and vomiting.

<table>
<thead>
<tr>
<th>Patient</th>
<th>Drug</th>
<th>Route</th>
<th>Dose</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has not taken opioid before and is able to take oral medication</td>
<td>† Immediate release morphine</td>
<td>Oral</td>
<td>2mg; titrate by 30 to 50% if required and tolerated</td>
<td>Every 4 to 6 hours and/or 2 hourly as required</td>
</tr>
<tr>
<td>Has not taken opioid before and is unable to take oral medication</td>
<td>† Morphine sulfate</td>
<td>Subcutaneous</td>
<td>1mg to 2mg; titrate as above</td>
<td>Every 4 to 6 hours and/or 2 hourly as required</td>
</tr>
<tr>
<td>Takes an opioid regularly for pain control</td>
<td>• Use the existing immediate release breakthrough analgesic dose (oral if able, or subcutaneous bolus injection equivalent) for the relief of breathlessness.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• A maximum of six doses can be taken in 24 hours for all indications (pain, breathlessness and cough).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Titrate both regular and breakthrough dose according to response.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is frail/elderly</td>
<td>Immediate release morphine</td>
<td>Oral</td>
<td>1mg to 2mg; titrate cautiously</td>
<td>Every 6 to 8 hours as required – monitor closely for side effects</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------</td>
<td>------</td>
<td>-------------------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Has impaired renal function</td>
<td>Refer to Renal End of Life Care guideline.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cannot tolerate morphine due to side effects</td>
<td>Second-line opioids may be effective for breathlessness (refer to Choosing and Changing Opioids guideline).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has ongoing breathlessness</td>
<td>Try modified release (long-acting) † oral morphine, plus a 4 hourly equivalent dose of immediate release † oral morphine as required for additional episodes of breathlessness.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Corticosteroids:**
- Trial † dexamethasone 8mg to 16mg daily (orally or parenterally) for lymphangitis or tumour-associated airway obstruction. Consider gastric protection.
- Unless starting emergency therapy, give corticosteroids in the morning.
- Review after 1 week, and reduce gradually to lowest effective dose where appropriate.
- If no effect, stop treatment.

**Benzodiazepines:**
- May relieve anxiety and panic associated with severe breathlessness, but are less effective than opioids for breathlessness and should be a third-line treatment for patients with symptoms unresponsive to non-drug measures and opioids. The following can be considered:
  - lorazepam (scored tablet) sublingual 500 micrograms, given 4 to 6 hourly as required (The Genus, PVL and TEVA brands are all blue, oblong, scored tablets and are suitable for sublingual † use)
  - diazepam oral 2mg to 5mg at night, if there is continuous distressing anxiety
  - † midazolam subcutaneously 2mg to 5mg, given 4 to 6 hourly as required, if oral or sublingual routes are not available.

**Oxygen:**
- Should only be given after careful individual patient assessment.
- Important to avoid psychological dependence.
- If oxygen saturation is less than 92%, consider a trial of oxygen for symptom relief. Be aware that there may be a poor relationship between hypoxaemia and breathlessness and response to oxygen.
• For emergency oxygen treatment in adults in hospital please refer to local guidelines where applicable.
• Refer to National Advisory Group for Respiratory MCN Prescribing Guidance.

**Inhaled therapy:**

- Reassess current inhaler technique and appropriateness of devices.
- Nebulised sodium chloride 0.9% 5ml as required may aid expectoration.
- If wheeze or COPD, give 2.5mg to 5mg salbutamol nebules four times per day.
- If still wheezy, add ipratropium bromide 250 microgram to 500 microgram nebules four times per day.

**Practice points**

- Non-pharmacological management techniques that help patients and families cope are essential. Using a self-management plan can help with symptom relief.
- However as the illness progresses, medication to relieve breathlessness may be required.
- Starting opioids at a low dose and titrating carefully is safe and does not cause respiratory depression in patients with cancer, COPD or heart failure.

**Patient/carer advice points**

- Becoming breathless on exertion is not harmful and will settle with rest after a few minutes.
- It is important to maintain activity levels.
- Keep rooms well ventilated: open a window, use a fan and keep the face cool.
- Carefully explain that while breathlessness, anxiety and panic are distressing they do not cause harm or worsen the patient’s condition.

**Resources**

References


