Managing Breathlessness in Palliative Care

MACMILLAN PALLIATIVE CARE EDUCATION TEAM

Activity

Have you tried...?

Understand what breathlessness feels like

If you want to get an idea of what breathlessness feels like for the person you support you could try doing the following:

- Take a deep breath in and then breathe out half way. Then breathe in again. Now breathe at that level for a few more breaths.
  OR
- Take a deep breath in and hold it as long as you can. What does it feel like?

Now imagine you had to go up some stairs breathing like that. This is what breathlessness can feel like.

Introduction to Breathlessness

Definition and Causes

Breathlessness is a distressing symptom caused by illnesses like cancer, COPD, pulmonary fibrosis, and heart failure.

Multifactorial Influences

Physiological, psychological, social, and spiritual factors all contribute to the complex experience of breathlessness.

Impact on Quality of Life

Breathlessness significantly impairs daily activities and causes emotional distress, reducing quality of life.

Holistic Management Approach

Effective care requires recognizing breathlessness as a complex symptom and using compassionate, holistic methods.

Assessment strategies

Grade	Description
1	Not troubled by breathlessness except with strenuous exercise
2	Troubled by shortness of breath when hurrying on the level or walking up a slight hill
3	Walks slower than people of the same age on the level because of breathlessness or has to stop for breath when walking at own pace on the level
4	Stops for breath after walking about 100 yards (90 m) or after a few minutes on the level
5	Too breathless to leave the house or breathless when dressing or undressing

- Undertake a holistic assessment using a multiprofessional approach.
- Ask the patient to rate symptom severity and assess the level of associated distress or anxiety. Use appropriate scales, eg modified MRC Dyspnoea Scale.
- Explore the patient's understanding of the reasons for breathlessness, fears, impact on functional abilities and quality of life.
- Clarify the pattern of breathlessness, precipitating, aggravating and alleviating factors, and associated symptoms.
- Check oxygen saturation levels using a pulse oximeter. **Note that readings may be less accurate in people with dark skin tone, so this should not be used as the only assessment measure.**
- Assess for any potentially reversible causes of breathlessness, such as infection, pleural effusion, anaemia, arrhythmia, pulmonary embolism and bronchospasm.
- Determine if treatment of the underlying disease is appropriate. Seek advice if in doubt.
- If there are signs and symptoms of superior vena cava obstruction or stridor refer to the specific guidance for those conditions**.**
- If in last days of life, refer to Care in the last days of life.

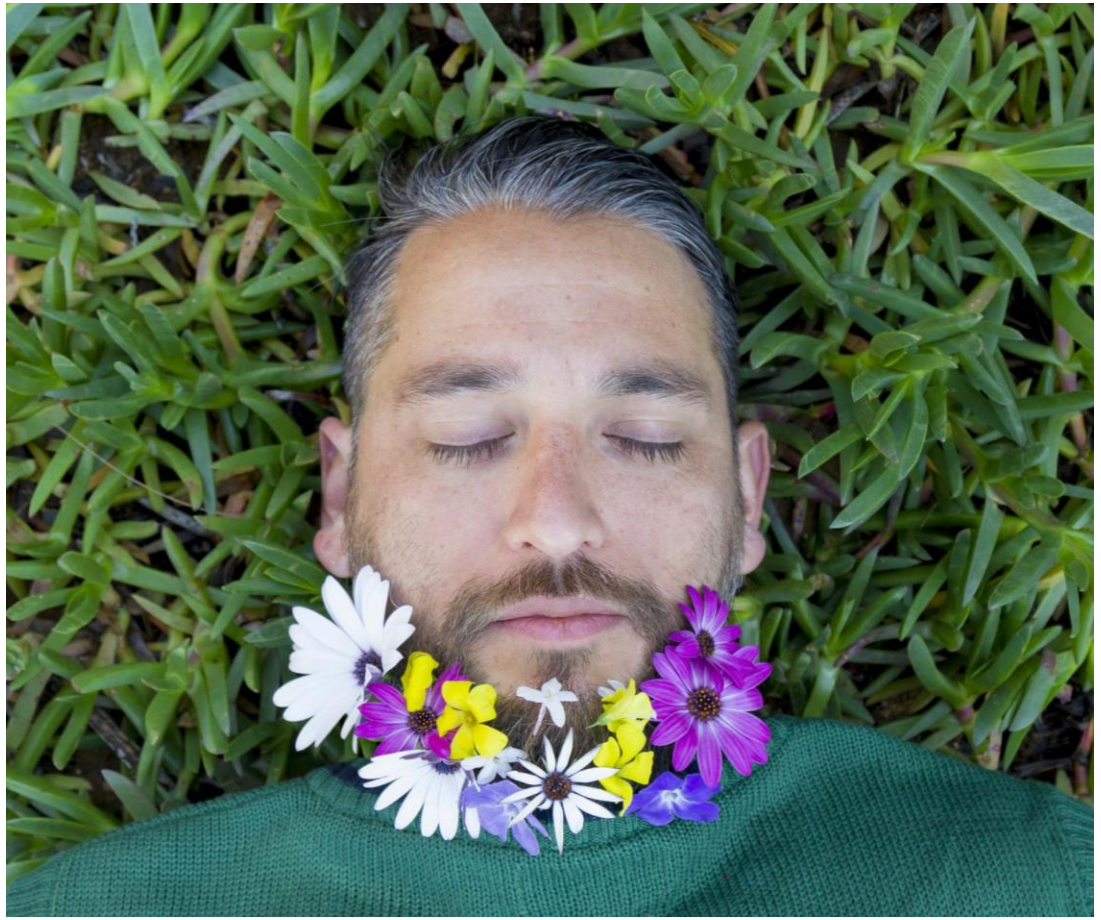
MANAGEMENT APPROACHES

Non-Pharmacological Interventions

Breathing and Positioning Techniques

Techniques like pursed-lip breathing and positioning help ease breathlessness and improve airflow.

‘Blow as you go’ Technique It is common for people to hold their breath and tense up during strenuous tasks such as lifting, shopping or standing up from a low chair. This makes the body use more oxygen because so many muscles are working at once. Help your muscles to stay relaxed by blowing out during strenuous activities such as lifting heavy objects or standing up. This should make you less breathless.

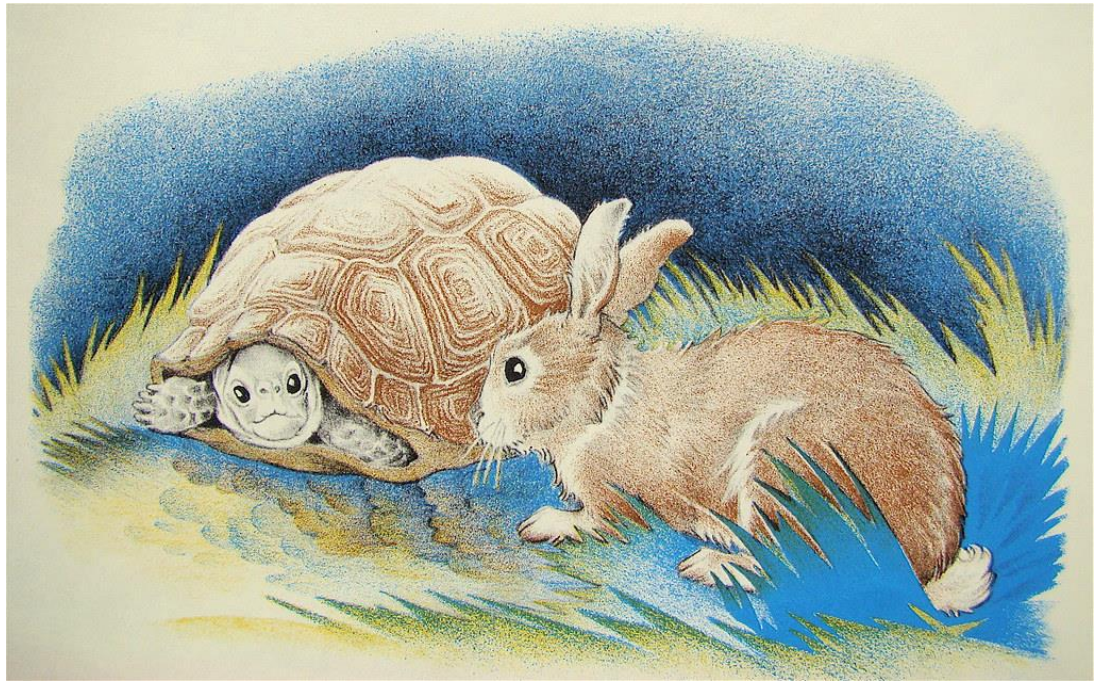


Non-Pharmacological Interventions

Pacing/Energy Conservation Advice

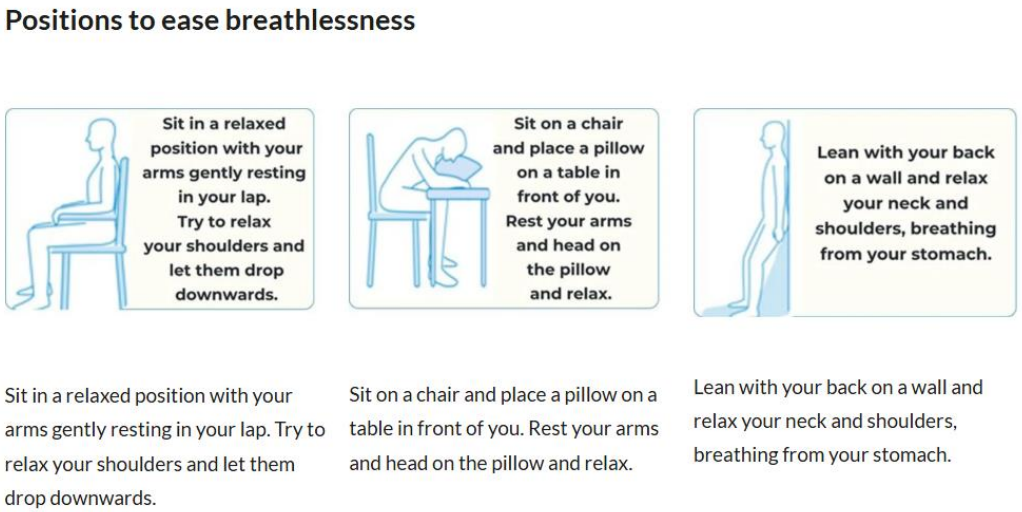
Pacing can help achieve more through saving energy and controlling breathlessness.

- Plan your day – Spread out demanding activities and plan in rest periods so that you rest before you become tired.
- Prioritise tasks and leave non-essential jobs for another day
- Save energy – Sit down during tasks such as ironing or cutting vegetables.
- Stay in control – Slow down and take frequent rests, learn to stop and perform the breathing exercise before you become very breathless. E.g. if you struggle climbing the stairs stop for a rest halfway up



Non-pharmacological Interventions

- Use of hand-held fans
- Open windows
- Positioning
- Consider referral to allied health professionals for palliative rehabilitation and management of breathlessness and respiratory function
- Package of care
- Supportive equipment



Non-pharmacological Interventions

- **Psychological and Physical Support**
  - Managing anxiety and fatigue with psychological support and encouraging activity helps coping.
- **Smoking Cessation and Environment**
  - Smoking cessation advice and creating smoke-free environments are essential for breathlessness management.

Pharmacological Management

For a person who is opioid naive

	Drug	Route	Dose	Frequency
Step 1	‡Immediate-release morphine sulfate OR	Oral	2 mg as needed for breathlessness	Maximum total of 6 doses in 24 hours Maximum frequency 1 hourly Maximum total oral dose 12 mg in 24 hours
	Morphine sulfate injection	Subcutaneously	1 mg as needed for breathlessness	Maximum total subcutaneous dose 6 mg in 24 hours
Step 2 If taking 3 or more doses per 24 hours with benefit	Immediate-release morphine sulfate OR	Oral	Commence 2 mg regularly	4–6 times a day depending on patient choice and severity Note: avoid waking patient in the night to administer sixth dose
	Morphine sulfate injection	Subcutaneously	Commence continuous subcutaneous infusion of 5 mg	Every 24 hours
Step 3 If taking 3 or more "as needed doses" per 24 hours with benefit in addition to regular dose	Immediate-release morphine sulfate OR	Oral	Titrate to effect; increasing by 30–50% of "as needed" doses required in the preceding 24 hours; review as needed dose	Convert to modified release preparation for regular dosing when doses of 10 mg per 24 hours or above are needed
	Morphine sulfate injection	Subcutaneously	Titrate to effect; increasing by 30–50% of "as needed" doses required in the preceding 24 hours; review as needed dose	Every 24 hours

Opioids for Breathlessness

Opioids, especially morphine, are primary agents for relieving breathlessness with careful dosing guidelines for opioid-naive patients.

- Can reduce breathlessness at rest, on exertion (taken 15–30 minutes before expected exertion) and in the last days of life.
- Give as a therapeutic trial; monitor patient response and side effects.
- When prescribing opioids, consider proactive prescribing for constipation and nausea
- Doses above 30 mg oral morphine in 24 hours may not confer additional benefit in terms of breathlessness management, if the person is opioid naive.

- **For a person already established on an opioid**
- Use the existing immediate-release breakthrough analgesic dose (oral if able, or subcutaneous bolus injection equivalent) for the relief of breathlessness.
- If taking a weak opioid such as codeine or tramadol, (ie WHO Pain Ladder step 2) consider switching to oral morphine equivalent dosing.
- 3 or more breakthrough doses taken in 24 hours for all indications (pain, breathlessness and cough) should trigger a dose review.
- Titrate both regular and breakthrough dose according to response.

Clinical Situations where a modified approach is needed:

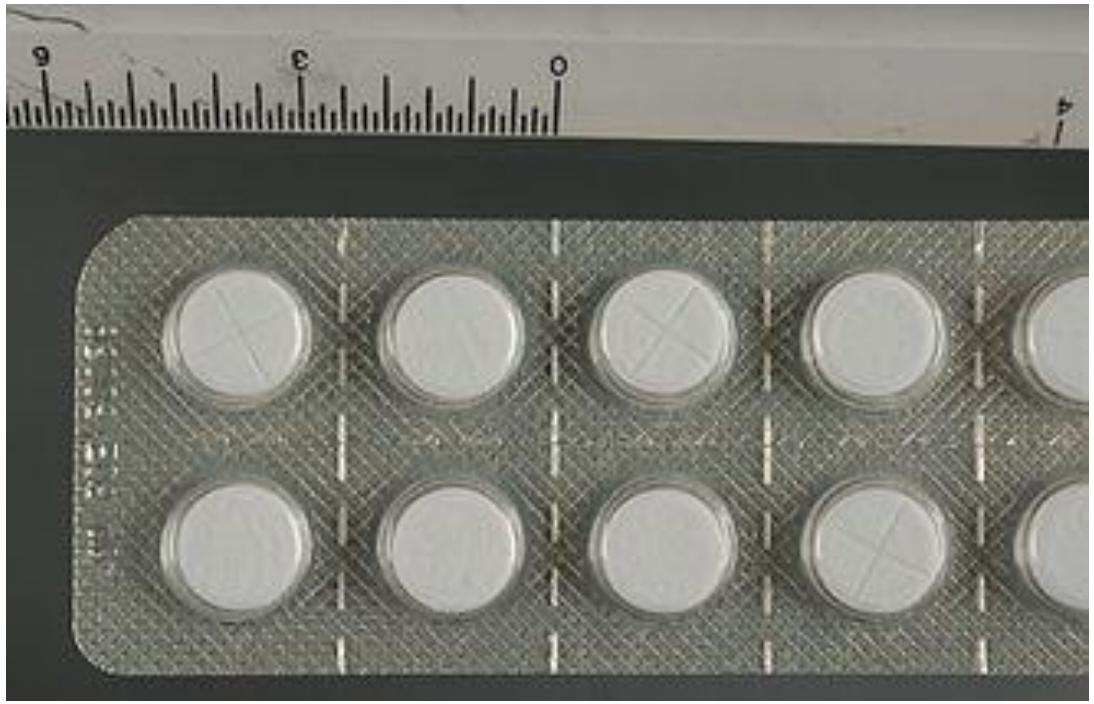
Clinical situations where a modified approach is needed

	Drug	Route	Dose	Frequency
Frailty	‡Immediate-release morphine	Oral	1 mg; titrate cautiously	Maximum total of 6 doses in 24 hours; Maximum frequency 2 hourly; maximum total oral dose 6 mg in 24 hours
Has impaired renal function	Refer to Renal care guideline			
Cannot tolerate morphine because of side effects	Second-line opioids may be effective for breathlessness. Refer to Choosing and changing opioids guideline.			
Has ongoing breathlessness	If dosing allows modified release (long-acting) ‡oral morphine is as effective and often more convenient for patients, plus a 4-hourly equivalent dose of immediate-release ‡oral morphine as required for additional episodes of breathlessness			

Corticosteroids

- Trial dexamethasone 8 mg to 16 mg daily orally (or parenteral equivalent) 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 the lowest effective dose where appropriate.
- If there is no effect, stop treatment by weaning as appropriate.

Benzodiazepines



- May relieve anxiety and panic associated with severe breathlessness but:
  - are less effective than opioids for breathlessness
  - 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 4–6 hourly as required. Oral solution and 250 microgram tablets are also available
  - diazepam oral 2 mg to 5 mg at night, if there is continuous distressing anxiety
  - †midazolam subcutaneously 2 mg, given 4–6 hourly as required, if oral or sublingual routes are not appropriate.

Oxygen

- Should only be given after careful individual patient assessment, including if the patient or any cohabitors or visitors are smokers.
- Only use if the patient is **hypoxic.**
- If oxygen saturation is less than 90% and the patient is not known to have COPD or type 2 respiratory failure, consider a trial of 1–2 litres/min of oxygen for symptom relief. It is important to be aware that there may be a poor relationship between hypoxaemia, breathlessness and response to oxygen.
- If there are concerns regarding the risk of type 2 respiratory failure, oxygen therapy should only be considered if saturations fall below the patient's target range (usually 88–92% but may be lower if advised by respiratory specialists).
- For Long Term Oxygen Therapy (LTOT) prescription or emergency oxygen treatment in hospital refer to local guidelines.

Inhaled Therapy

CONSIDER INHALERS AND NEBULISERS

- Reassess current inhaler technique and appropriateness of devices.
- Nebulised †sodium chloride 0.9%, 5 ml as required may aid expectoration.
- If the patient has wheeze or COPD, give 2.5 mg to 5 mg salbutamol nebules four times per day, regularly and up to another four times in 24 hours as required.
- If still wheezy, add ipratropium bromide 250 microgram to 500 microgram nebules four times per day

SUBCUTANEOUS FRUSEMIDE

- Patients with breathlessness or oedema related to heart failure, who are no longer able to take, or are not responsive to oral diuretics, may achieve symptom benefit through continuous subcutaneous infusion (CSCI) of furosemide.
- The dosing of subcutaneous furosemide is a 1:1 conversion from the oral dose (ie oral 120 mg daily would be 120 mg/24 hrs CSCI). However, maximum dosing may be limited by syringe pump volume.
- Furosemide injection can be diluted with sodium chloride 0.9%, if remaining syringe capacity allows, or administered without diluent if not. The solution should be protected from light. A yellow solution should be discarded.
- Monitoring may include patients' weight, standard observations (blood pressure, pulse respiratory rate) and bloods (renal function) but only if appropriate, as indicated by the patient’s condition. Regular monitoring of the infusion site is advised.

CLINICAL PRACTICE CONSIDERATIONS

Practical Tips and Monitoring

Self-Management Plans

Encourage patients to use self-management plans tailored to their individual breathlessness needs and symptoms.

Nutritional Support

Provide small, frequent meals with high-protein or high-calorie content to support nutrition during breathlessness.

Medication Monitoring

Review medication regimens regularly and titrate opioid doses carefully to avoid respiratory depression.

Vital Monitoring and Infusion Care

Monitor weight, vital signs, renal function, and assess infusion sites regularly for safe and effective therapy.

Resources and Support

Clinical Guidelines

Scottish Palliative Care Guidelines offer detailed recommendations and dosing protocols for breathlessness management.

Patient Information

NHS Inform provides accessible advice for patients and carers on symptom control and coping techniques.

Respiratory Support

Asthma + Lung UK delivers education and support for respiratory health to patients and healthcare providers.

Professional Development

Enhanced Palliative Care online modules help clinicians improve symptom management skills and knowledge.

Any questions?