PALCARE
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THE JIMMY S BILIMORIA FOUNDATION

PALLIATIVE CARE
GUIDELINES
FOR A HOME SETTING IN INDIA

BREATHLESSNESS

INTRODUCTION

Breathlessness or dyspnoea is a distressing symptom in cancer patients. It has a devastating impact on family and carers. It is a poor prognostic indicator. It is defined as "a subjective experience of breathing discomfort that consists of qualitatively distinct sensations that vary in intensity". Dyspnoea in cancer is often multifactorial.

Common causes of dyspnoea in cancer patients

- Cancer related (direct) - Lung cancer or metastasis, lymphangitic carcinomatosis, airway obstruction, pleural effusion, pericardial effusion, superior vena cava obstruction, ascites, phrenic nerve lesion-diaphragmatic paralysis, hepatomegaly
- Cancer related (indirect) - Cachexia, electrolyte imbalances, anaemia, pulmonary embolism, neurologic para-neoplastic syndromes, aspiration, pneumothorax, pneumonia, anxiety
- Treatment related - Surgery, radiation (pneumonitis, pulmonary fibrosis, pericarditis), chemotherapy (pulmonary fibrosis, cardiomyopathy, neutropenic infections), steroid myopathy
- Concomitant Diseases - COPD, congestive cardiac failure, bronchial asthma

ASSESSMENT

- Assessment must determine the underlying aetiology of breathlessness, effectiveness of treatment and impact on quality of life for the patient and his/her family (***refer to the Guideline - Symptom Assessment***)
- Use Edmonton Symptom assessment scale to assess the symptom and the therapeutic outcome and document the same
- Assess for anxiety/panic
- Laboratory investigations (as appropriate, to identify reversible causes)
    - Haemoglobin level, oxygen saturation
    - Imaging - Chest radiograph, CT Thorax/CT Pulmonary angiogram, Echocardiogram

MANAGEMENT

Recommendation

- Aim for rapid subjective improvement and comfort
- The goals of care should depend on the prognosis and the likely risks and benefits of investigations and treatments

- Use pharmacological and non-pharmacological measures in the management of breathlessness
- A multidisciplinary approach is essential- doctor, nurse, physiotherapist, social worker, occupational therapist, community volunteer, psychologist, chaplain

Explanation and education

- Describe to the patient and carer, the symptom and the cause
- Reassure them that the symptom can be addressed and patient can be made comfortable
- When appropriate explain the possibility of terminal breathlessness and ways of managing it
- Explore and acknowledge distress, anxiety and panic
- Teach the purpose of each medication, including opioids, dosing and rescue dose and ensure compliance
- Explain non-pharmacological measures

Correct the correctable

- Superior vena cava (SVC) obstruction - corticosteroids/stent - consult the oncologist if palliative chemotherapy/radiotherapy is appropriate
- Airway obstruction – corticosteroids / stenting / palliative chemotherapy or radiotherapy (if appropriate)
- Lymphangitic carcinomatosis - corticosteroids, diuretics
- Anaemia - transfusion (if appropriate)
- Anxiety - benzodiazepines
- COPD/asthma - bronchodilators as inhalers/nebulizers, corticosteroids/beta 2 agonists
- Congestive heart failure/coronary artery disease/arrhythmias - appropriate medications
- Pleural effusion-pleural tap, if recurrent - can consider pleurodesis (when appropriate)
- Pericardial effusion - pericardiocentesis
- Ascites - drainage of ascitic fluid
- Infection - antibiotics
- Radiation pneumonitis - corticosteroids
- Pulmonary embolism - anticoagulants

Non-pharmacological measures

- Always approach the patient in a calm and confident manner
- Open windows and improve ventilation of the room
- Use of a table fan/hand held fan to blow air on the face
- Position the patient, leaning forward with arms resting; avoid pressure of the chest and abdomen
- Keep the patient in loose and comfortable clothing
- Encourage breathing exercises - demonstrate the pursed lip breathing technique

- Use equipment aids - walker/wheel chair
- Teach ways to pace activity - according to patient's level of tolerance; and ask for help to do tasks when required
- Distraction techniques - reading, music, companionship, watching television
- Relaxation techniques - Music therapy, massage, visualisation techniques

Pharmacological measures

- **Opioids**
  - Drug of choice for palliation of dyspnea in advanced disease of any cause
  - Most useful in dyspnoea at rest and at end-of-life
  - Those with dyspnoea on exertion may only need it on prn basis
  - Dose should be individualised and titrated
  - The required dose of morphine for dyspnoea is generally low (oral morphine 20-30mg/day)
  - Provide prophylactic anti-emetics and laxatives

Opioid Naïve	Able to take orally	• Start with Immediate release Morphine 2.5mg PO prn • If >2 doses/24 hours, prescribe morphine PO q4h and prn
	Unable to take orally	• Start with parenteral Morphine 1-2mg S/C prn • If >2 doses/24 hours, prescribe Morphine S/C q4h and prn
If already on opioids	Able to take orally	• Increase the morphine dose by 30% • Individual titration according to response
	Unable to take orally	• Use the subcutaneous equivalent morphine (50% of oral dose) CSCI, if switching from oral to subcutaneous route and use q4h dose as rescue dose • Increase the morphine dose by 30% according to response • Individual titration according to response
	On Fentanyl Patch	• Add immediate release Morphine 2.5mg PO prn and if three or more doses/24 hours, prescribe morphine 2.5mg PO q4h and prn • If >2 doses/24 hours, prescribe morphine PO q4h and prn

- **Corticosteroids**
  - Useful in specific situations like lymphangitis carcinomatosis / airway obstruction / SVC obstruction
  - Trial of Dexamethasone 8-16mg OD (PC)

- Administer in the morning - Avoid after 02:00 pm unless it is an emergency
- Stop steroids if no response is evident after one week

- **Benzodiazepines**
  - Should not be used as the first line in management of breathlessness
  - Consider using in instances of panic or anxiety
  - Use Tab. Lorazepam 0.5 - 1mg S/L hsod and prn (frequency may be increased based on the severity)
  - Administer Tab. Diazepam 2.5 - 5 mg hsod (up to 2.5mg tid)

- **Oxygen**
  - Give a trial of oxygen only if hypoxemia is present - oxygen saturation < 90%
  - Start at 2L/minute
  - Nasal prongs are better tolerated than mask

- **Bronchodilators**
  - Trial of bronchodilators using inhaler/spacer/ nebulizer - stop if no benefit is evident
  - Use Salbutamol 2.5-5.0mg q6h
  - Administer Ipratropium bromide 250-500mcg q6h
  - Nebulise with normal saline as first line to loosen secretions and aid expectoration

- **Terminal breathlessness (*refer to the Guideline - End-of-Life Care - Distressing Symptoms)***

References

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