Leeds Palliative Care Network

Leeds Palliative Oxygen Therapy Guidelines

Produced in Partnership with: Leeds Community Healthcare NHS Trust Leeds Teaching Hospitals NHS Trust St. Gemma's Hospice and Sue Ryder Wheatfields Hospice	Version 1.0	
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Contents

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Scope Of Guidelines

This is intended as a practical concise guide to the indication and delivery of oxygen for professionals who are considering the use and/or prescription of palliative oxygen therapy. It is assumed that a holistic assessment of the patient's palliative care needs has been undertaken and that other modalities of managing breathlessness have been optimised.

This guidance does not specifically cover Advance Care Planning (ACP), although the prescription of oxygen is likely to have implications for this: healthcare professionals would be advised to ensure that any existing ACP is reviewed and updated, or new discussions undertaken.

Background

"The term 'palliative oxygen therapy' (POT) refers to the use of oxygen to relieve the sensation of refractory persistent breathlessness in advanced disease or life-limiting illness irrespective of underlying pathology where all reversible causes have been or are being.
treated optimally." [1]

The British Thoracic Society (BTS) acknowledge there is contradictory evidence with regards to the benefit of oxygen therapy in the palliation of breathlessness and that measures of oxygenation do not correlate with the subjective experience of breathlessness in patients with cancer or end stage cardiorespiratory disease. [2] Research has shown that although there is some evidence suggesting that oxygen may be useful in relief of breathlessness, there is no difference between oxygen and air in managing breathlessness in nonhypoxic patients.
[2] It is thought that facial cooling by means of a hand-held fan may be of benefit. [2,3,4]

Breathlessness is a distressing symptom and multifactorial in nature. There is greater evidence of the benefit of opioids and non-pharmacological treatments for breathlessness in palliative care patents [1,2]. Please refer to:

A practical guide to coping with breathlessness: Information for patients

Patient information Videos on Managing Breathlessness

Opioids for Breathlessness in Advanced Disease Guideline

Management and Recommendations

Palliative oxygen therapy can be considered, in line with patients wishes, who have cancer or end stage cardio-respiratory disease and are experiencing intractable breathlessness despite:

1) Being on maximum treatment for underlying disease [1,5,6] and
2) All reversible causes for breathlessness have been addressed [1,5,6] and
3) Hypoxic <90% (or non-hypoxic for whom ALL other approaches have been exhausted).
[2]

Before prescribing oxygen, the following **must** be assessed and addressed as appropriate:

- Smoking status (patient and other residents). DO NOT prescribe oxygen for current smokers or where there are other safety concerns (identified within the risk assessment) please discuss with community respiratory team first.

Ensure a personalised breathlessness management plan is in place including:

- Psycho-social factors - as distress from breathlessness can be multi-dimensional.
- Trial non-pharmacological measures: please refer to.

  A practical guide to coping with breathlessness: Information for patients

  Patient information Videos on Managing Breathlessness
- Breathing relaxation
- Trial a hand-held fan
- Life modifying strategies, by involving physio and occupational therapists.
- Trial of opioids (unless contraindicated) and assess response [5,6]

  Opioids for Breathlessness in Advanced Disease Guideline

How to Prescribe and Order Oxygen Therapy at Home

Distress from breathlessness is not correlated to degree of hypoxemia therefore aim for the lowest flow rate to reduce breathlessness **(AN ARTERIAL BLOOD GAS IS NOT REQUIRED FOR PRESCIPTION OF PALLIATIVE OXYGEN)**.

If nasal cannula are used the flow rate can be initiated at 1litre per min (LPM) increasing to 4-5 LPM, beyond these flow rates patients often experience discomfort when using nasal cannula. If a venturi mask is preferred by patient, then 24%-28% mask should be used initially. Flow rates of 2-5 LPM rate are suggested for relief in the studies according to the BTS [6]. It is thought that facial cooling by means of a hand-held fan may be of benefit. [2,3] Following the BTS recommendation, the use of **symptom scores to determine flow rates rather than SpO2** readings should be used. Most benefit is likely to occur in the first 24 hours, and nearly all symptomatic and functional improvements within the first 3 days of use [7]. After initiation of treatment benefit should be assessed and the oxygen removed if not beneficial.

Oxygen at home can be administered by either a static concentrator or a large (static) cylinder. When a concentrator is prescribed a backup static cylinder is also provided. Either nasal cannula or venturi mask can be ordered.

Consideration needs to be given to potential risks of hypercapnia in those patients susceptible, commonly COPD and those with neuromuscular disease, as well as smoking status. **These patients should be discussed with community respiratory team.**

PRESCRIBING FLOWCHART

PRESCRIBE POT IN PATIENTS WITH INTRACTABLE BREATHLESSNESS AT END OF LIFE IF: -

- Medically optimised
- Nonpharmacological interventions have been trialled and psychosocial factors addressed.
- Hypoxemic (Sp02≤90%) OR
- Non-Hypoxic where all other approaches have been exhausted.

CAUTION

- Ensure smoking cessation is addressed.- Do not prescribe oxygen if a current smoker or household smoker
- Risk assesses and complete Initial Home Oxygen Risk Mitigation (IHORM)* If risk identified seek advice from the Community Respiratory Team
- Potential RISK of hypercapnia needs to be considered.

ASSESS

- Prescribe 1 to 4 LPM initially via nasal cannula or if a mask is preferred 24 -28%
- Titration of the flow and/or % of oxygen should be in response to assessment of symptom benefit

PRESCRIBE

- Register for Baywater Healthcare portal to prescribe, request delivery and receive email confirmation of receipt, installation or if rejected. (See Below*)
- Complete-Home Oxygen Risk Mitigation Form (IHORM) and Home Oxygen Consent (HOCF) See Below **
- Orders can be processed within 3 days, next day or within 4 hours if clinically indicated.

INFORM & MONITOR

- Inform the Leeds Home Oxygen Assessment and Review Service of the initiation of Oxygen therapy. (leeds.hosar@nhs.net)
- Provide the patients Name, NHS No, DOB and indication for the oxygen prescribed.
- The Community Respiratory Team will conduct a safety visit within 4 weeks and review the prescription and equipment as necessary
- Upon installation the patient/carer will be provided with a demonstration on the equipment
- Always follow up to assess response
- Cancel home oxygen if of no benefit.

Clinical systems

Oxygen prescriptions should be recorded in the “other section” of the relevant clinical system.

Useful Links

**Initial Home Oxygen Risk Mitigation (IHORM) and Home Oxygen Consent (HOCF) form must be completed IHORM and Oxygen Consent form

Oxygen - Safety - Baywater Healthcare

Baywater Heathcare Portal*

In order to prescribe home oxygen register for an account on the Baywater Healthcare clinician online portal* This ensures the prescriber receives timely confirmation of receipt of the order, delivery, and installation; as well as prompt notification if the order is declined or there are any problems installing the equipment.

For access and information on how to register for the Baywater Healthcare Clinician Portal follow this link**:- *** Our Online Portal - Baywater Healthcare **(Oxygen Provider),** There is a short 2 minute video explaining registration and access process.

The Respiratory Service can be contacted for advice around equipment and completing HOOFs and IHORMs as necessary (See below). Other options include the Baywater Healthcare Helpline: Tel :0800 373580.

How to Contact the Community Respiratory Service

If any advice is needed about the prescription or on-going management of oxygen therapy, please contact the community respiratory team on the numbers below:

Community Respiratory Team service operating hours Mon-Fri 08.30-16.30

Contact details Mon- Friday 8.30- 16.30

Admin 0113 8434200

Co-ordinator 0113 8434539

Mobile 07534282336

Bank Holiday: 8.30-16.30 Mobile 07534282336

References

1. Hardinge M, Annandale J, Bourne S, et al. British Thoracic Society guidelines for home oxygen use in adults. Thorax 2015;70(Suppl 1): i1–43
2. O'Driscoll BR, Howard L, Earis J et al. British Thoracic Society Guideline for Oxygen use in Adults in Healthcare and Emergency settings Thorax 2017:72 (Suppl 1): i1-90.
3. Galbraith S, Fagan P, Perkins P, et al. Does the use of a handheld fan improve chronic dyspnoea? A randomized, controlled, crossover trial. J Pain Symptom Manage 2010; 39:831–8.
4. Chew S, Young H. Palliative Home Oxygen: practical framework for clinicians. BMJ Supportive and Palliative Care 2024; 0:1-5
5. Update NHS National Home Oxygen Safety Group. Good HOOF (Part A) guide for Primary and Out of Hours teams Nov 2020
6. Suntharalingam J, Wilkinson T, Annandale J*, et al* British Thoracic Society quality standards for home oxygen use in adults *BMJ Open Respiratory Research* 2017;**4:** e000223. doi: 10.1136/bmjresp-2017-000223
7. Nonoyama ML, Brooks D, Guyatt GH, et al. Effect of oxygen on health quality of life in patients with chronic obstructive pulmonary disease with transient exertional hypoxemia. Am J Respir Crit Care Med 2007;176(4):343-9?

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