



## HOME OXYGEN PRESCRIBING: AN UPDATE

### Introduction

The BTS guideline for the use of home oxygen in adults in the UK was published in June 2015. This offers an evidence-base for the use of different oxygen modalities with outcomes such as mortality, symptoms and quality of life. This pull-out is a quick reference guide for key recommendations for home oxygen provision for the primary care physician. It includes discussion of long-term oxygen therapy (LTOT >15 hours per day), ambulatory oxygen therapy (AOT), nocturnal oxygen therapy (NOT), short-burst oxygen therapy (SBOT) and palliative oxygen therapy (POT).



### The Use of Palliative Oxygen

Oxygen might be of use in end-stage cardiorespiratory or malignant disease as POT after the trial of other evidence-based interventions

- Fan therapy or opiates (rather than oxygen) should be used initially for intractable breathlessness with saturations >92%.
- Specialist referral might be made in persistent dyspnoea unresponsive to conventional therapies for consideration of POT.

### The Use of Oxygen in COPD

- Home oxygen showed survival benefit when used for >15 hours per day in a selected subgroup of COPD patients ( $pO_2 < 8$  (sats 94%) with signs of pulmonary hypertension or  $< 7.3$  kPa (sats 92%)).
- Aim to reach a target  $PO_2$  of  $> 8$  kPa.
- Refer following a period of clinical stability of 8 weeks, all medically optimised patients (on maximal inhaled therapy, post-pulmonary rehabilitation and following appropriate stop smoking treatment) with saturations  $< 92\%$ .
- Monitor saturations annually in all patients with saturations 93-94%.
- LTOT patients may benefit from AOT if they are mobile out-of-doors to aid with exertional hypoxia or dyspnoea.
- SBOT is unsuitable for those individuals not meeting LTOT criteria.
- AOT should only be considered for COPD patients unsuitable for LTOT after proving benefit to exercise tolerance.
- Patients with nocturnal desaturation (not on LTOT), alternative diagnoses such as obstructive sleep apnoea, obesity hypoventilation syndrome or neuromuscular disease should be sought, possibly with referral to home ventilation services.
- There is no role for NOT in COPD patients not needing LTOT.

### Assessment for Oxygen and Withdrawal of Oxygen

- Assessment, withdrawal and review of oxygen provision all carried out by relevant Home Oxygen assessment services (HOAS).
- Two ABGs taken three weeks apart.
- Oxygen supply may include up-titration of oxygen flow rates at night or on exercise, on balance with possible risk of rise in  $CO_2$ .
- HOAS decide on risk of oxygen provision in smokers. There is limited clinical benefit for LTOT in smokers.
- Reassessment at 6 months and thereafter annually.
- Oxygen will be withdrawn if criteria no longer met.
- If oxygen is provided on discharge due to clinical instability (rare), oxygen withdrawal might occur at follow-up within 8 weeks of hospital discharge.

### OXYGEN USE IN OTHER CIRCUMSTANCES

- Pulmonary hypertension with saturations  $< 94\%$  may benefit from LTOT.
- Heart failure patients might be eligible for LTOT if saturations are  $< 92\%$  (or  $< 94\%$  with signs of pulmonary hypertension).
- Heart failure patients not meeting LTOT criteria with evidence of sleep disordered breathing (without signs of obesity hypoventilation or obstructive sleep apnoea) may consider NOT.
- AOT may be considered to improve exercise tolerance in ILD patients (with marked exertional dyspnoea) even if LTOT not required. There is no evidence for NOT in ILD.
- AOT may be appropriate for Cystic Fibrosis patients with exertional desaturation ( $> 4\%$  to  $< 90\%$  on exercise), not meeting LTOT criteria. Usually done by respective CF centre. NOT in CF should only be prescribed in combination with nocturnal ventilatory support.
- SBOT has excellent evidence-base in cluster headache. There is usually sufficient prodrome to allow SBOT provision to be made as an emergency delivery.

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- Opportunity to attend annual meeting of group/network leaders for training, support, networking and information relevant to your role as a group leader



The PCRS-UK is grateful to Napp Pharmaceuticals for the provision of an educational grant to support the activities of the Affiliated Group Leaders programme in 2015. \*subject to terms and conditions of affiliation

For more information or to arrange a call with an existing group leader to learn more about the benefits of affiliation email us at [tricia@pcrs-uk.org](mailto:tricia@pcrs-uk.org)

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