

Procedure funded subject to Audit

Policy Statement 21: Short Burst Oxygen Therapy for the relief of breathlessness

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Ratified and adopted: April 2013

The South Central Priorities Committees have reviewed the evidence for the use of Short Burst Oxygen Therapy (SBOT) for the management of breathlessness and in line with the NHS Home Oxygen Service commissioning framework¹, consider the use of SBOT to be a LOW PRIORITY due to the limited evidence of clinical effectiveness and lack of cost effectiveness.

Patients should only be considered treatment with SBOT for the relief of breathlessness:

- If all other treatment options have been tried and
- When the diagnosis is clear and the underlying condition is already being treated optimally and
- Following objective assessment including a record of oxygen saturation by a clinician with a special interest and training in the management of respiratory diseases
- Existing patients on SBOT will need to be properly reviewed and assessed by a Specialist Respiratory Assessment Service so that the home oxygen therapy that they receive is the most appropriate for their condition, for the right period of time and with appropriate flow rates to obtain optimal benefits and reduce the chance of adverse effects. Specialist assessment is essential prior to any changes in oxygen therapy service being suggested or implemented. These changes may mean that some patients are assessed for LTOT/ambulatory oxygen therapy.

Since the NICE guideline (CG12 2004) on COPD was published, no new studies indicate that SBOT is clinically effective for the management of breathlessness rather than hypoxia. There is no new evidence to show that SBOT has a significant impact on an individual's ability to perform activities of daily living (ADL). Some studies showed small improvements e.g. in recovery times post ADL tasks (38seconds), walking distance (c.6metres further) but despite the many numbers of patients using SBOT, the trials have involved only very small numbers of patients who might not have been representative of oxygen users in general and who received oxygen under laboratory-type conditions. Furthermore, the studies are all of poor quality with differences in trial design, different outcome measures, exercise regimens and methods of oxygen delivery.

Short burst oxygen (SBOT): refers to "the intermittent use of supplemental oxygen at home usually for periods of about 10 to 20 minutes at a time to relieve dyspnoea. Often the resting PaO₂/SaO₂ may be normal. Some would argue that there is a large placebo effect, due to the

cooling effect of the oxygen on the face: a similar effect may be achieved using a fan.” SBOT is differentiated from the provision of continuous oxygen with exercise and termed ambulatory oxygen therapy. “

Long term oxygen therapy (LTOT): refers to “the provision of oxygen therapy for continuous use at home for patients with chronic hypoxaemia (PaO₂ at or below 7.3 kPa, (55mmHg)). The oxygen flow rate must be sufficient to raise the waking oxygen tension above 8 kPa, (60 mmHg). Once started, this therapy is likely to be life long. LTOT is usually given for at least 15 hours daily, to include night time, in view of the presence of worsening arterial hypoxaemia during sleep.” LTOT typically consists of an oxygen concentrator, which is connected to an electricity supply (patients are reimbursed for the electricity costs)

Ambulatory oxygen: refers to “the provision of oxygen therapy during exercise and activities of daily living.” This oxygen is delivered by equipment that can be carried by most patients and can be prescribed to patients on LTOT who are mobile and need to or can leave the home on a regular basis. The type of portable device provided will depend on the patients mobility. Relatively few patients with COPD actually use ambulatory oxygen therapy for more than 4 hours daily on the first instance. Ambulatory oxygen requires lightweight cylinders, eventually attached to an oxygen-conserving device, or liquid oxygen, supplied in a large-capacity reservoir tank with a portable domiciliary unit.

NOTES:

1. Exceptional circumstances may be considered where there is evidence of significant health impairment and there is also evidence of the intervention improving health status.
2. This policy will be reviewed in the light of new evidence or guidance from NICE.
3. Further information on policy statements is available from <http://www.fundingrequests.cscsu.nhs.uk/> .