3T’s Policy Statement: Short Burst Oxygen Therapy for the relief of breathlessness.

The committees referred to below, have reviewed the evidence for the use of Short Burst Oxygen Therapy (SBOT) for the management of breathlessness and consider the use of SBOT to be a LOW PRIORITY due to the limited evidence of clinical effectiveness and lack of cost effectiveness. However we recognise that this is a difficult area and there may be exceptional circumstances which will have to be considered by clinicians on a case by case basis.

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. SBOT is differentiated from the provision of continuous oxygen with exercise and termed ambulatory oxygen therapy. “

Although there appears to be little evidence to support the use of SBOT, it has traditionally been used for:

- Breathlessness during recovery from exercise
- Breathlessness at rest
- Relief of episodic breathlessness, not relieved by other treatments, in patients with severe COPD, interstitial lung disease, heart failure
- Palliative Care.

New patients should only be considered for 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.
- Should only be considered for episodes of severe breathlessness in patients with COPD not relieved by other treatments (NICE CG101 2010).

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
- with appropriate flow rates to obtain optimal benefits and reduce the chance of adverse effects.
- should only continue to be prescribed if an improvement in breathlessness following therapy has been documented (NICE CG101 2010).

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.

Evidence base:
Since the NICE guideline (CG12 2004) on COPD was published (new updated COPD guideline is CG101, published in June 2010), 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 (38 seconds), 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.

NOTES: 1. Potentially exceptional circumstances may be considered by the NHS Wiltshire where there is evidence of significant health status impairment (e.g. inability to perform activities of daily living).
2. This policy will be reviewed in the light of new evidence or guidance from NICE.

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