BTS Quality Standards for Home Oxygen Use in Adults

Appendix 6

ASSESSMENT PROTOCOL FOR PALLIATIVE OXYGEN (from BTS Home Oxygen Guideline 2015)

There is no consensus for the correct clinical assessment strategy for the use of oxygen in palliative care, although multiple tools exist for assessing dyspnoea. This assessment protocol is suggested best practice by the guideline group and applies to patients with cancer or end stage cardio-respiratory disease who are experiencing intractable breathlessness and who are hypoxaemic with resting $SpO_2 < 92\%$. The Numerical Rating Scale score is recommended as this approach was used in evidence sited. First ensure patient is on maximum treatment for underlying diseases where possible and reversible causes for breathlessness have been or are being treated optimally.

- As distress from breathlessness can be multi-dimensional, ensure psycho-social factors have been assessed and addressed.
- Trial of non-pharmacological measures including teaching of breathing relaxation and life modifying strategies by involving physio and occupational therapists.
- Trial of hand held fan before consideration of oxygen therapy.
- Assess response to opioids if they have been tried.
- Check SpO₂ using pulse oximetry at rest and/ or after exertion.

The subjective severity and intensity of breathlessness should therefore be recorded regularly to evaluate the degree of suffering caused and the effect of treatment. A numerical rating scale (NRS) from 0 to 10 has been found useful for this purpose (0 = no shortness of breath, 10 = worst shortness of breath imaginable). Treatment should focus on patients with dyspnoea scores (NRS) of ≥ 4 , and especially those with scores ≥ 7 . Recurrent assessment with standardized scales is prudent, especially when using an N-of-1 approach, as it is difficult to predict which patients will benefit (1).

Prescription

As distress from breathlessness is not correlated to degree of hypoxemia, the flow rates for symptom relief in the studies identified range from 2 – 5 litres/min. It is suggested therefore that oxygen flow rates be determined by symptom score on an individual basis rather than SpO₂ reading. Additional consideration needs to be given to potential risks of hypercapnia if oxygen is given at higher flow rates.

Equipment

Concentrator or cylinder as determined by patient's needs.

Follow Up

Oxygen therapy like any pharmacological intervention should be best considered on trial basis and be reviewed regularly while balancing between benefits and risks.

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 (1). Follow-up and assessment of response should fit with these timescales.

1. 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