Breathing strategies

Bausewein et al (2008) noted in their review that "breathing training" was supported by moderate strength evidence, but a specific definition of the term was not given. Breathing techniques, positioning and relaxation were all included under the heading.

A more relaxed, controlled breathing pattern can minimise the work of breathing and produce more effective ventilation than the shallow, rapid pattern of dyspnoea (Twycross et al, 2009). It can also re-establish a sense of control for the patient and break the cycle of increasing dyspnoea and panic (Jantarakupt and Porock, 2005). Similarly, deep inhalation through the nose followed by pursed-lip exhalation increases lung expansion and improves gas exchange (Twycross et al, 2009).

Positioning

There is little research regarding the effect of positioning on breathlessness (Jantarakupt and Porock, 2005). However, anecdotal evidence supports the beneficial effects of careful attention to positioning, even in the terminal phase of illness (Davis, 2005).

Leaning forward, for example sitting on the edge of the bed with arms folded on the bedside table, is a comfortable position that can reduce dyspnoea (Fig 1). In this position, there is less transdiaphragmatic pressure and the abdominal wall can move outward more easily (Jantarakupt and Porock, 2005). This provides more space for lung expansion and gas exchange.

Relaxation

Relaxation is generally achieved through verbal instructions regarding progressive muscle relaxation or guided imagery. Complete muscular relaxation can decrease oxygen consumption, carbon dioxide production and respiratory rate (Jantarakupt and Porock, 2005).

A lack of data means that the evidence for relaxation therapies cannot be judged (Bausewein et al, 2008); however, given the role that anxiety plays in precipitating and exacerbating breathlessness, interventions that interrupt the escalation of anxiety can be useful. Nurses can discuss the benefits of a peaceful environment with patients and carers. Relaxation tapes or CDs and complementary therapy are often available in palliative care units.

These non-pharmacological measures are cost effective strategies that can be easily explained by nurses (Jantarakupt and Porock, 2005) and implemented by patients and carers. They provide simple, practical tips that are especially helpful during acute exacerbations.

CONCLUSION

Current management of breathlessness is unsatisfactory due to a limited understanding of its complex pathophysiology, its subjective nature and numerous research difficulties. The result is a lack of evidence, which prevents a consistent approach to treating breathlessness in practice and ultimately hampers the service received by patients and carers. The evidence based information in this article can be useful to both general nurses and those in palliative care settings. Management advice can be discussed with patients and carers to increase their ability to self manage this distressing symptom of advanced disease.

NURSING Learning

Nursing Times Learning offers cost effective, high quality online learning. For a unit on Non-Invasive Ventilation for Acute Hypercapnic Respiratory Failure, go to www.nursingtimes.net/ventilation

REFERENCES


