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Authors' Response

We thank Kako et al. for their interest and comments on our recent paper: "The hand-held fan and the Calming Hand for people with chronic breathlessness: a feasibility trial."[1]

We agree that the data support a larger trial and that the findings regarding recovery time are promising. We do, however, emphasize the exploratory nature of the data as the trial was not designed to demonstrate effectiveness.

With regard to baseline variation of breathlessness intensity, we are unsure as to the concern. For a larger subsequent study, this is likely to reduce with increased numbers. However, if there was a concern that there may be a clinical important between group differences at baseline (≥1),[2] an a priori analysis plan which included adjustment for such differences should address the issue. Alternatively, participants could be stratified by moderate or severe breathlessness. We used a well-recognized way to describe the baseline population as an eligibility criterion, the Medical Research Council (MRC) breathlessness scale grade ≥3[3]. The baseline characteristics (NRS Intensity average last 24 hours = mean 5, SD 1.62) confirm that we recruited our target population of people with at least moderate levels of breathlessness and between-group differences did not reach the clinically important difference.

We agree that the role of the carer is important and supporting their needs is an integral component of a multidisciplinary complex intervention for breathlessness management.[4–7] Our study's aim was to assess the feasibility of conducting a Phase III RCT, and as such, it was not designed to test a specific carer intervention for breathlessness management. Carers were included in the study to ensure that their perspective of the feasibility and acceptability of using the fan and Calming Hand as patient self-management strategies for exertion-induced breathlessness were represented and helped inform the design of a future trial.

Demographic Data	Exercise Advice ($n = 10$)	Fan & Exercise Advice ($n = 10$)	CH & Exercise Advice ($n = 10$)	Fan & CH & Exercise Advice ($n = 10$)	Total ($n = 40$)
NRS intensity average last 24 hours	5.0 (2.11) 2–8	5.5 (1.43) 4–8	4.7 (1.77) 2–8	4.8 (1.13) 3–7	5.0 (1.62) 2–8

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The Use of Continuous Positive Airway Pressure Ventilation in the Palliative Management of Stridor in a Head and Neck Cancer Patient

Introduction

Upper airway obstruction and stridor are common symptoms faced by head and neck cancer patients. Progression of cancers of the head and neck region often results in an audible stridor when the primary tumor occupies an already anatomically restricted space in the upper airway. Management of upper airway obstruction includes nonpharmacological maneuvers such as head tilt, chin lift, and jaw thrust.[1] Pharmacological measures are usually limited to the relief of symptoms associated with the airway obstruction such as breathlessness and stridor. These include steroids, opioids, and benzodiazepines. The distressing symptom of stridor may be challenging to manage at the end of life with clinicians facing the potential development of terminal asphyxiation. In these patients, alternative methods of relieving stridor and its resulting complication of respiratory failure are required.[2−5] Discussions regarding prophylactic tracheostomy should be conducted with patients and their family as part of a management strategy. We report the use of continuous positive airway pressure (CPAP) as a means of noninvasive ventilation in the palliative management of stridor at the end of life.

Case Description

Mdm. Chan, a 91-year-old lady, was diagnosed with metastatic cricopharyngeal cancer before her referral to our home hospice care service. The primary tumor had metastasized to surrounding lymph nodes and her disease continued to progress despite her being placed on immunotherapy. Radiological investigations revealed a large posterior pharyngeal mass sitting above the laryngeal inlet and obscuring the view of the vocal cords. In view of the high risk of complete laryngeal obstruction, radiotherapy was offered which both family and patient declined (partly due to risk of potential worsening of stridor because of inflammation as well as the advanced age of the patient).

Subsequently, Mdm. Chan received palliative care at home. As her disease progressed, she developed a loud audible stridor which could be heard in both inspiratory and expiratory phases of respiration. This greatly distressed her family members although she was comfortable. An attempt to reposition her head and neck while lying down improved the stridor, limiting it only to the expiratory phase. As Mdm. Chan deteriorated further, she developed dyspnea and insomnia, which was accompanied with restlessness. Pharmacological agents such as subcutaneous fentanyl (average of 75 mcg a day in three divided doses of 25 mcg) and subcutaneous midazolam (average of 5 mg a day in two divided doses of 2.5 mg) were given for palliation of her dyspnea and restlessness. These agents provided temporary relief but her audible stridor continued to worsen.