Benefits of interventions for respiratory secretion management in adult palliative care patients-a systematic review.

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BACKGROUND: Respiratory secretions impact negatively on palliative patients. Unfortunately, a gold standard therapy is not yet available. The purpose of this study was to identify which interventions are in use to control respiratory secretions in patients with chronic disease with a poor prognosis and verify their effects on outcomes relevant for palliative care patients.

METHODS: A systematic review of the literature with narrative summary was conducted. We searched eight electronic databases in April (6th), 2016. Citation-tracking and reference list searches were conducted. We included randomized controlled trials, crossover trials, observational and qualitative studies regarding interventions for respiratory secretion management in adult patients with chronic diseases that met inclusion criteria indicating short prognosis.

RESULTS: Six randomized controlled trials, 11 observational studies, ten crossover trials and one qualitative study were found. Interventions included mechanical insufflation-exsufflation (MIE), expiratory muscle training, manually-assisted cough, tracheotomy, chest physiotherapy, suctioning, air stacking, electrical stimulation of abdominal muscles, nebulized saline, positive expiratory pressure masks, percussive ventilation, high frequency chest wall oscillations. The interventions with most promising benefits to patients in palliative care were manually-assisted cough and mechanical insufflation-exsufflation to promote expectoration and percussive ventilation to improve mucous clearance.

CONCLUSION: Therapies, such as manually assisted cough, mechanical insufflation-exsufflation and percussive ventilation, which aim to deal with respiratory secretion, were the most promising treatment for use in palliative care for specific diseases. Nevertheless, the evidence still needs to improve in order to identify which treatment is the best.

KEYWORDS: Cough; Palliative Care; Respiratory secretion; Sputum

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