

## **Breakthrough breathlessness: is there a role for nebulised narcotics?**

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Breathlessness is a very distressing symptom for palliative care patients and families as well as for professional carers. Research is lacking in how to best manage this debilitating symptom. Recent studies have indicated that systemic narcotics, given as regular daily medications, are useful to relieve the perception of background breathlessness. However there is little available evidence concerning the way to treat breakthrough, or acute episodic, breathlessness.

This double-blind controlled cross-over study was designed to compare the effects of nebulised hydromorphone, systemic hydromorphone and nebulised saline for the relief of episodic breathlessness in advanced cancer patients. On three occasions, patients, when acutely breathless, randomly received either nebulised hydromorphone, a systemic breakthrough dose of hydromorphone or nebulised saline together with a blinding agent.

Breathlessness was scored before and 10, 20, 30 and 60 minutes post-treatments using a 100mm visual analogue scale. Twenty patients completed the trial. Ratings did not differ significantly across pre-test treatments. Change in ratings from pre- to 10 minutes post-treatment were analysed using t-tests. Each of the treatments resulted in statistically significant improvements in breathlessness, but there were no significant differences between treatments. Over time, breathlessness decreased significantly for all treatments, with no significant differences between treatments. Taken as a whole, these results suggest that it is reasonable to trial the use of nebulised saline, rather than narcotics, as a first line treatment for breakthrough breathlessness.