

Symptomatic therapy of dyspnea with strong opioids and its effect on ventilation in palliative care patients

[Clemens KE](#), [Klaschik E](#).,

Department of Science and Research in Palliative Medicine, University of Bonn, and Center for Palliative Medicine, Malteser Hospital Bonn/Rhein-Sieg Bonn, Germany.

katri-elina.clemens@malteser.de

This study assessed the effect of opioid treatment on ventilation in dyspneic palliative care patients who received symptomatic treatment with strong opioids. The assessments measured changes in peripheral arterial oxygen saturation (SaO₂), transcutaneous arterial pressure of carbon dioxide (tcPCO₂), respiratory rate (f), and pulse rate (PF) during the titration phase with morphine or hydromorphone. The aims of the study were to verify the efficacy of opioids for the management of dyspnea, assess the effect on ventilation, and show whether nasal O₂ insufflation before opioid application leads to a decrease in the intensity of dyspnea. Eleven patients admitted to our palliative care unit were included in this prospective, nonrandomized trial. At admission, all patients suffered from dyspnea. tcPCO₂, SaO₂, and PF were measured transcutaneously by means of a SenTec Digital Monitor (SenTec AG, Switzerland). During O₂ insufflation, the intensity of dyspnea did not change. In contrast, the opioid produced a significant improvement in the intensity of dyspnea (P=0.003). Mean f decreased as early as 30 minutes after the first opioid administration, declining from 41.8±4.7 (35.0-50.0) to 35.5±4.2 (30.0-40.0), and after 90 minutes, to 25.7±4.5 (20.0-32.0) breaths/min. Other monitored respiratory parameters, however, showed no significant changes. There was no opioid-induced respiratory depression.

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