

## Palliative ventilatory support: same knowledge, different goal

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Palliative care as a clinical field emerged in the 1990s, aiming at improving end-of-life (EOL) experience for seriously ill patients (1). It changed the way to approach families saying them that their loved ones were approaching the end limiting life support while maintain comfort (2). It is now also evident that palliative care has not only to be seen as the job of consultants or by specialists in this field but also an approach to care at the “primary” level by intensivist, intensive care unit (ICU) nurses, and other clinicians (2).

Dyspnea is one the most common, stressful and difficult to treat symptom during the EOL (3). It is associated with significant suffering for both patients and caregivers and it is often associated with fatigue, pain, anxiety and increased mortality (4). During the last decades, palliative care principles and measures have been introduced in critical care (5). Nowadays, there is the need for critical care physicians to know how to treat symptoms in spontaneously breathing patients receiving palliative treatments (e.g., cancer patients). For long time, oxygen and opioids were considered the cornerstones of EOL dyspnea treatment. However, oxygen is not effective in dyspnoic patients without hypoxemia and there is low quality evidence for the use of opioids (3).

Palliative ventilation is primary defined as any ventilatory support aimed at treating dyspnea, and not the disease “*per se*”. Furthermore, its application may also be extended to those patients, with limitation of care, affected by acute respiratory failure (ARF) [e.g., hematologic patients with Do-Not-Intubate (DNI) order]. Noninvasive ventilation (NIV) has been studied for these purposes (6). It was shown to reduce dyspnea and morphine consumption in cancer patients compared to oxygen and may be a good

option in DNI situations. (7). However, one of the most important principles of palliative care is the need to allow the interaction between patient and caregiver and NIV may be seen as an unpleasant “barrier” mainly due to the interface (8). In addition the role of palliative non-invasive ventilation, in many countries can be performed only in the ICU (7). Very recently, a panel of leading experts from the European Respiratory Society gave a conditional recommendation and moderate certainty of evidence for the use of NIV in dyspnoic patients for palliation in the setting of terminal cancer or other terminal conditions (7). The less invasive application of HFNT has been recently surveyed for palliative care purpose (9). A randomized phase II study compared high flow nasal therapy (HFNT) with NIV for the treatment of dyspnea in cancer patients. HFNT was as effective as NIV in terms of symptom control, oxygenation and patients’ satisfaction. However, the sample size was low and the study was prematurely stopped (9). HFNT was also studied in DNI patients with acute respiratory failure (ARF) leading to improved oxygenation, reduced work of breathing and low rate of NIV initiation (3). In conclusion, in the next decades, the integration between palliative care and critical care will further increase in terms of clinical evidence, knowledge and application (10). With the fast speed of health care advances, palliative care inside and outside the ICU will turn into new perspectives. Critical care staff should be able to provide palliative care when there is nothing else to do to cure the patient’s underlying disease (5). Changing their point of view, they should be able to use their knowledge on ventilatory supports for a different purpose: to treat the symptoms and improve quality of life.

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## Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

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