

Quick Guide to Treating Dyspnea with Opioids

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Key Talking Points:

- There is no evidence of clinically significant adverse respiratory effects from opioids
- Opioids, such as morphine, are effective in relieving breathlessness
- Anxiolytics, such as lorazepam, should be used 2nd line to treat anxiety that accompanies breathlessness

Dyspnea is the subjective sensation of being unable to breathe that results from a mismatch of the perceived need to breathe and perceived inability to breathe. Like pain, there is no objective way to measure the sensation of dyspnea. Even patients with normal oxygen saturation levels can feel dyspneic. The best way to evaluate the severity of dyspnea is through the patient's self-report and observing signs of anxiety and breathlessness.

How do opioids relieve dyspnea?

The exact mechanism by which opioids alleviate dyspnea is unknown. One theory is that opioids decrease respiratory distress by altering the perception of breathlessness in the brain and decreasing ventilatory response to decreasing oxygen and rising CO₂ levels. **Contrary to common belief, opioids do not improve dyspnea through inhibition of the respiratory drive- in fact, opioids improve dyspnea without causing significant deterioration in respiratory function.**

What opioid should I use and at what dose?

Morphine is the most studied for the management of dyspnea, but opioids such as hydromorphone or oxycodone are also effective. Expert consensus recommends initiating therapy with a low dose and titrate until dyspnea is controlled. **The usual starting dose for opioid naïve patients is 5-10 mg po or sublingual or 2-4 mg IV/SC of morphine. If the initial dose of IV opioid is ineffective after 2 doses at least 15 minutes apart, double the dose.**

Should I try an anxiolytic first?

While anxiolytics such as lorazepam are often used to treat dyspnea, they do not take the place of opioids and do not treat the dyspnea directly. Anxiolytics should be used second-line or in combination with opioids to relieve the anxiety that may contribute to shortness of breath.

Do opioids hasten death?

Some clinicians are reluctant to use morphine or other opioids to manage dyspnea due to concerns that doing so will depress respiration and hasten death. **A systematic review of 67 studies that included 35 randomized control trials (RCTs) found no evidence of clinically relevant adverse respiratory effects in patients with breathlessness treated with opioids¹. The risk of respiratory depression is very minimal when therapy is initiated at a low dose and titrated based upon patient response and tolerability.** Ethically, there is no justification for withholding opioid treatment in patients with refractory dyspnea out of fear of potential respiratory depression.

¹Verberkt CA, van den Beuken-van Everdingen MHJ, Schols JMGA, et al. Respiratory adverse effects of opioids for breathlessness: a systematic review and metaanalysis. Eur Respir J 2017; 50: 1701153 [https://doi.org/10.1183/13993003.01153-2017].