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Prone positioning for patients with COVID-19

Podcast link: https://soundcloud.com/cmajpodcasts/201201-view

During the pandemic, prone positioning of patients with COVID-19 with respiratory distress who are not on ventilators has become common despite a lack of definitive evidence. A new review published in *CMAJ* (*Canadian Medical Association Journal*) outlines evidence for the practice. VIEW ARTICLE

"Since the COVID-19 pandemic has overwhelmed some health systems around the globe, leading to intensive care resources becoming strained, prone positioning for patients who are breathing spontaneously and not intubated is an attractive intervention because of its easy administration in many care settings and sound physiologic rationale," writes Dr. Michael Fralick, Division of General Internal Medicine and Geriatrics, Sinai Health System and the University of Toronto, with coauthors.

Prone positioning refers to placing patients face down on the chest and abdomen to relieve pressure on the lungs. Before the pandemic, prone positioning was the standard of care for patients on ventilators with severe acute respiratory distress syndrome (ARDS), based on strong evidence from clinical trials. In addition to patients with ARDS from COVID-19, prone positioning is now being used for patients with COVID-19 who are not ventilated and are breathing spontaneously.

However, as the evidence for use of prone positioning in spontaneously breathing people is of low quality, there is a need for high-quality evidence to support the practice.

"Cost-effectiveness studies are lacking, and while it appears that prone positioning can be implemented outside of critical care settings, it may result in increased use of personal protective equipment if several health care workers need to assist with prone positioning throughout the day," says Dr. Kevin Venus, Division of General Internal Medicine and Geriatrics, University Health Network and the University of Toronto. "On

the other hand, if prone positioning is shown in future studies to decrease admissions to critical care units, this would translate into significant cost savings."

There is also a need for hospitals to provide guidance and training on prone positioning.

"Prone positioning of patients with COVID-19 on medical wards may become a more common practice in an effort to prevent mechanical ventilation if critical care resources become overwhelmed," the authors write. As modelling studies have indicated this may be a risk for Canadian hospitals if public interventions are not followed, hospitals should therefore develop or adopt guidance on prone positioning and support rapid knowledge translation and training of clinical staff."

"Prone positioning for patients with hypoxic respiratory failure related to COVID-19" is published November 11, 2020.

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