
Prolonged vs Shorter Awake Prone Positioning - COVID-19 With Acute Respiratory Failure



Awake prone positioning has been shown to reduce endotracheal intubation in patients with COVID-19-related acute hypoxaemic respiratory failure (AHRF). This method has also become standard care for patients with moderate to severe acute respiratory distress syndrome (ARDS).

During the COVID-19 pandemic, studies suggested that awake proning in non-intubated patients with AHRF could prevent the need for invasive mechanical ventilation and reduce intubation rates, although the optimal duration was unclear. Some evidence indicates that longer periods of awake prone positioning, such as ≥ 6 hours per day, may improve outcomes. However, there is no high-quality trial proving that prolonged awake proning significantly reduces intubation rates compared to shorter durations.

A prospective, multicentre, randomised controlled trial was conducted to determine if a strategy aiming for 12 hours of daily awake prone positioning for seven days could lower the intubation rate at 28 days in non-intubated patients with COVID-19-related AHRF. The study was conducted at 12 hospitals in China. Non-intubated patients with COVID-19-related AHRF were assigned to either prolonged awake prone positioning (targeting more than 12 hours daily for seven days) or standard care with a shorter period of awake prone positioning. The primary outcome measured was the rate of endotracheal intubation within 28 days after randomisation. Key secondary outcomes included mortality and adverse events.

The study included 409 patients. Those assigned to prolonged awake prone positioning (12 hours/day) had a lower intubation rate (17%) compared to those receiving standard care (27%), with a relative risk of 0.62. The hazard ratios for intubation and mortality were 0.56 and 0.63, respectively, favouring prolonged awake prone positioning. The incidence of pre-specified adverse events was low and similar between both groups.

This trial found that prolonged awake prone positioning significantly reduced the rates of intubation and mortality within 28 days in patients with acute hypoxaemic respiratory failure due to COVID-19. Adverse effects were rare and similar in the prolonged awake prone positioning and standard care groups.

Source: [Intensive Care Medicine](#)

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