

## Prevalence and Risk Factors for Delirium in COVID-19 ICU Patients



According to findings from a large study, COVID-19 patients admitted to the ICU in the early months of the pandemic had a higher burden of delirium and coma than is typically found in patients with acute respiratory failure. The findings are published in *The Lancet Respiratory Medicine*.

Study investigators tracked the incidence of delirium and coma in 2088 COVID-19 patients admitted in the ICU before April 28, 2020. Patients across 14 countries were included. 82% of the patients in the study were comatose for a median of 10 days, while 55% were delirious for a median of three days. Acute brain dysfunction lasted for a median of 12 days.

Findings suggest that the choice of sedative medications as well as limitations on family visitation may have played a role in increasing acute brain dysfunction in these patients. ICU delirium research and guidelines recommend well-calibrated pain management with discontinuation of analgesics and sedatives, daily spontaneous awakening trials, daily spontaneous breathing trials, regular delirium assessments, early mobility and exercise and family engagement.

Study authors note that a number of patient care factors and the pressures on healthcare due to the pandemic may have played a role in the higher burden of acute brain dysfunction in COVID-19 patients. The use of outmoded critical care practices such as deep sedation, the widespread use of benzodiazepine infusions, immobilisation and isolation from families could be contributing factors. Also, the authors point out that during the pandemic, there has been a significant abandonment of clinical protocols that could help ward off acute brain dysfunction in critically ill patients.

Findings highlight the need for more careful management of COVID-19 patients during the second and third waves. ICU teams should consider a return to lighter levels of sedation, frequent awakening and breathing trials, mobilisation and safe and in-person or virtual family visits.

Many ICUs have used sedation practices during the pandemic that are not in line with best practice guidelines. Due to the huge number of cases and demand on ICU staff, there has also been a shortage of ICU providers informed about best practices. Management techniques for lung dysfunction have included deep sedation, but this may have had a negative impact on the brain function of COVID-19 patients.

According to the data provided in the study, 88% of patients were invasively mechanical ventilated during hospitalisation. 67% of these were ventilated on the day of their admission to the ICU. Patients who received benzodiazepine sedative infusions were at a 59% higher risk of developing delirium, and those who were allowed family visitation (either in-person or virtual) were at a 30% lower risk of delirium.

These findings highlight the need for more careful management of COVID-19 patients during the second and third waves. ICU teams should consider a return to lighter levels of sedation, frequent awakening and breathing trials, mobilisation and safe and in-person or virtual family visits.

Source: [The Lancet Respiratory Medicine](#)

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