

Category :**Sedation - analgesia**

A234 - Over-sedation as a risk factor for delirium in critically-ill covid-19 and non covid-19 patients with ards: a dual center analysis

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Introduction:

Over-sedation is an important issue for critically ill patients, and has been associated with increased mortality and morbidity, including delirium. Patients with acute respiratory Distress Syndrome (ARDS) frequently require deep sedation and neuromuscular blockade to optimize mechanical ventilation.

Methods:

We assessed the incidence of over-sedation and delirium in COVID-19 and non COVID-19 patients and sought any differences between those with and without ARDS. Depth of sedation was monitored through use of continuous processed EEG. Delirium was evaluated through use of the CAM-ICU. The main outcomes were the incidence of over-sedation and delirium and the correlation between them in COVID-19 and non COVID-19 patients with and without ARDS. A total of 78 patients were included into the study, 38 of whom had ARDS, 21 of whom had COVID-19 disease. The mean monitoring time for the COVID-19 and the non-COVID-19 patients was respectively 43 and 50 hours. Thirty-eight (49%) of the total 78 patients fulfilled the criteria for over-sedation.

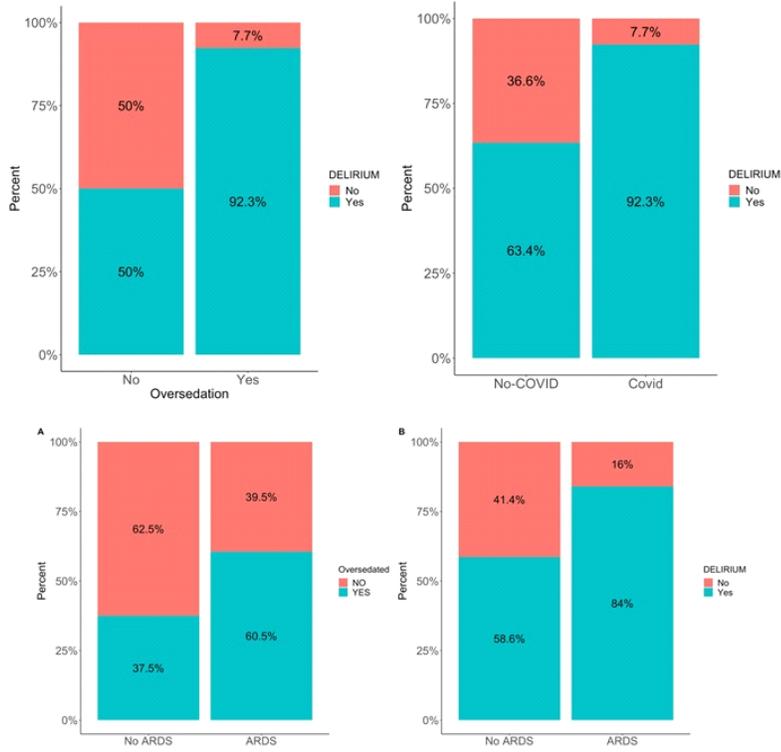
Results:

There was a statistically significant association between the incidence of delirium and over-sedation (OR 11.4, $p < 0.001$) and age (OR 1.04, $p = 0.017$). When adjusting for age, over-sedation was still significantly associated to delirium (OR 8.35, $p = 0.002$). COVID-19 patients showed a non-significant higher percentage of delirium (92.3% vs 63.4%, $p = 0.076$). Although non-significant, there was a higher incidence of over-sedation (60.5% vs 37.5%, $p = 0.069$), and delirium (84% vs 58.6%, $p = 0.07$) in ARDS patients.

Conclusion:

This study shows that, besides age, over-sedation represents an important risk factor for delirium in mechanically ventilated patients, and that over-sedation and delirium were more common in ARDS vs non ARDS patients. It supports the use of continuous EEG-based monitoring systems for the quantification of sedation depth and highlights the necessity for larger, randomized trials to verify if monitoring the depth of sedation can improve outcome.

Image :



Incidence of oversedation and delirium in Covid vs non-covid and ARDS vs non-ARDS patients