

Perceptions and practices regarding light sedation in mechanically ventilated patients: A survey on the attitudes of Brazilian critical care physicians

Percepções e práticas sobre sedação superficial em pacientes sob ventilação mecânica: um inquérito sobre as atitudes de médicos intensivistas brasileiros

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Questionnaire

- 1) Do you agree to participate in the study?
 Yes. No.
- 2) Are you a physician and work in an adult ICU?
 Yes. No.
- 3) How many years do you have been working in intensive care medicine?
 < 5 years. 5 - 10 years. > 10 years.
- 4) Are you a specialist in intensive care medicine?
 Yes. No.
- 5) What region of Brazil do you work in?
 Midwest. Northeast. Southeast. North. South.
- 6) What kind of hospital do you work in?
 Public. Private. University.
- 7) How many beds does your ICU have?
 ≤ 10 beds. 11 - 20 beds. > 20 beds.
- 8) Does your ICU have a residency and/or specialization program in intensive care medicine?
 Yes. No.
- 9) Does your ICU have a multiprofessional round (at least 5 days a week)?
 Yes. No.
- 10) Among the protocols below, indicate which are fully implemented (applied to more than 80% of eligible patients) in your ICU (Check all that apply):
 Assessment of sedation with validated scales.
 Daily interruption of sedation.
 Goal-guided sedation.
 Assessment of pain with validated scales.
 Assessment of *delirium* with validated scales.
 Maintenance of light sedation.
- 11) In your ICU who applies the protocols to patients daily? (Check all that apply):
 Nurse. Nursing technician. Physiotherapist. Physician.

- 12)** Regarding the implementation of sedation-guided protocols, what challenges are present in your ICU? (Check all answers that apply):
- Reduced number of staff.
 - Absence of definition of clear sedation goals.
 - Unfamiliarity or absence of sedation-guided protocols.
 - Great individual variation (or lack of standardization) in the choice of sedatives to be used.
 - Difficulty in accessing fast-acting medications (e.g. dexmedetomidine, propofol).
 - There is no barrier to implementation in the ICU.
- 13)** Considering the degree of importance for the interventions below only for mechanically ventilated patients WITHOUT COVID-19:
- Light sedation should be used from the first day of intubation:
 Totally agree. Agree. Neutral. Disagree. Totally disagree.
 - Deep sedation should be used until stabilization and later sedation superficial:
 Totally agree. Agree. Neutral. Disagree. Totally disagree.
 - The preferred sedative is midazolam and can be associated with fentanyl:
 Totally agree. Agree. Neutral. Disagree. Totally disagree.
 - The preferred sedative is propofol:
 Totally agree. Agree. Neutral. Disagree. Totally disagree.
 - The preferred sedative is dexmedetomidine:
 Totally agree. Agree. Neutral. Disagree. Totally disagree.
 - Ketamine can be used, but in exceptional situations:
 Totally agree. Agree. Neutral. Disagree. Totally disagree.
 - Adjuvant opioids must be used in most patients:
 Totally agree. Agree. Neutral. Disagree. Totally disagree.
- 14)** Considering the degree of importance for the interventions below only for mechanically ventilated patients WITH COVID-19:
- Light sedation should be used from the first day of intubation:
 Totally agree. Agree. Neutral. Disagree. Totally disagree.
 - Deep sedation should be used until stabilization and later sedation superficial:
 Totally agree. Agree. Neutral. Disagree. Totally disagree.
 - The preferred sedative is midazolam and can be associated with fentanyl:
 Totally agree. Agree. Neutral. Disagree. Totally disagree.
 - The preferred sedative is propofol:
 Totally agree. Agree. Neutral. Disagree. Totally disagree.
 - The preferred sedative is dexmedetomidine:
 Totally agree. Agree. Neutral. Disagree. Totally disagree.
 - Ketamine can be used, but in exceptional situations:
 Totally agree. Agree. Neutral. Disagree. Totally disagree.
 - Adjuvant opioids must be used in most patients:
 Totally agree. Agree. Neutral. Disagree. Totally disagree.
- 15)** Regarding the use of midazolam for mechanically ventilated patients:
- Should be considered as a first line sedation.
 - It is cheaper than propofol.
 - It is cheaper than dexmedetomidine.
 - The total cost of hospitalization of a patient sedated with midazolam is less than of patients sedated with propofol or dexmedetomidine.
 - It is associated with longer duration of mechanical ventilation when compared to other regimes of sedation.

- 16)** Regarding the use of propofol for mechanically ventilated patients:
- The use of the 2% formulation is safer.
 - The costs are not a factor limiting its routine use.
 - Formulations with EDTA reduce significantly the risk of bloodstream infection.
 - The lipid supply represents a risk even if monitored.
 - Prolonged use (> 7 days) represents a significant risk and should be avoided.
- 17)** Regarding patients using neuromuscular blockers:
- Benzodiazepines are the sedatives of choice.
 - Adjuvant opioids must be used in most patients.
 - Propofol can be used in most patients.
 - Dexmedetomidine can be used for sedation.
- 18)** Regarding the use of deep sedation in patients under mechanical ventilation:
- Deep sedation in first 48 hours of mechanical ventilation no affect the outcome of patients.
 - Must be implemented systematically in all patients with ARDS.
 - Has association with increase in duration of hospitalization and mortality.
 - May be associated with decline in cognitive function even after hospital discharge.
 - It is associated with the greatest risk of *delirium* in the ICU regardless of the type of sedative used.
- 19)** Regarding the use of light sedation in patients under mechanical ventilation:
- It is associated with increased morbidity and mortality from adverse events.
 - It is associated with a higher risk of long-term events such as post-traumatic stress syndrome.
 - It can be performed effectively, regardless of the type of sedative used, as long as dose titration protocols are implemented.
 - It can be achieved with the use of “daily interruption of sedation” or “goal-guided sedation protocol”.
- 20)** In neurocritical patients (Check all that apply):
- Preferably use midazolam.
 - Preferably use propofol.
 - Preferably use other combinations of sedatives (e.g. dexmedetomidine, ketamine).
 - Superficial sedation recommendations can be implemented as long as there is no in.