

A sedation wake up protocol in the intensive care setting Can re-implementation make a difference?

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Purpose

The aim of this project was to re-implement and increase compliance with the sedation wake up (SWU) protocol in mechanically ventilated patients on continuous sedative infusions in the adult intensive care unit (ICU).

Background

ICU nurses are at the forefront of sedation driven protocols to treat a multitude of patient conditions. Recent evidence supports a daily interruption or a “holiday” from sedative infusions in mechanically ventilated patients to optimize their outcomes. Patients that received a daily sedation interruption compared to standard sedation weaning had less ventilator days, a lower ICU length of stay and lower rates of complications related to critical illness (e.g. ventilator associated pneumonia (VAP), upper GI bleed, bacteremia). The SWU protocol was developed and implemented to the nursing and critical care medicine staff as part of the VAP prevention bundle of care in 2006. It was noted that compliance with the protocol was low related to lack of familiarity with the protocol and fear of potential harm to the patient related to interrupting the sedative infusions.

Methods

Compliance with the use of the SWU protocol in the ICU was measured in Spring 2007. Data related to sedative infusions and mechanical ventilation was also collected. The research literature related to sedation interruptions and complications of sedation in mechanically ventilated patients was reviewed. The re-implementation plan included education with emphasis on the evidence base for the practice change and on the impact of this nursing intervention on patient outcomes. Inservice education was provided at the unit leadership meeting, the unit staff meeting and in the unit newsletter during Summer 2007. The rationale for the SWU protocol and instruction for how to perform and document the SWU was reinforced during clinical rounds. The SWU protocol reference was replaced in each bedside book. The compliance with use of the SWU protocol will be remeasured in Fall 2007.

Results

Sedation and mechanical ventilation data from 14 random days in the adult medical-surgical ICU resulted in 329 patient days worth of data. The baseline compliance data revealed that the SWU was attempted in only 20/64 (31%) of patients receiving sedative infusions and mechanical ventilation. Documentation of the rationale for not attempting the SWU was present for 4/44 (9%) of patients who did not have the SWU attempted. Post-intervention compliance results will be presented by December 2007. There were not reports of complications (e.g. self-extubation) related to the SWU protocol since re-implementation.

Conclusions

There was positive feedback from the nursing staff as awareness was increased related to when and how to use the SWU protocol. Keys to the success of this practice change were the focus on the evidence base for the change and the emphasis on the impact that this nursing intervention has on the tangible morbidity and potential mortality of our critically ill patients.