Sedation Impact on GCS and GOS Measurements

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Introduction

Sedation administration is a common practice in critical care nursing and has an impact on both Glasgow Coma Scale (GCS) and Glasgow Outcome Scale (GOS) measurement. The GCS measures the level of consciousness following an acute brain injury, with lower scores indicating higher morbidity. The GCS is a neurological scale which aims to give an objective way of documenting a patient’s consciousness.

The GOS focuses on the degree of recovery, with lower scores indicating higher morbidity.

Research Question

What are the effects of sedation on the neurological outcomes in the ICU?

Methods

• “ICU Delirium AND Drug Abuse;” “ICU Delirium AND Sedation;” “Sedation AND Glasgow Outcome Scale”
• Inclusion: articles <= 10 years, humans, English, measured GCS and GOS, some type of sedation, head injury, any gender
• Exclusion: articles >10 years, Non-English, history of psychiatric, dementia or neurological disease

Results

There were statistically significant results, which revealed a relationship between sedative dose and GOS measurement. This patient population experienced subarachnoid hemorrhages (SAH). This played a role in the level of significance of the relationship between sedative dose and GOS.

Conclusion

There was a significant correlation between sedation and poor outcome after the SAH was thoroughly observed. This sample size was small, and a larger sample size is of high importance to confirm this finding. There is also still the need of determining the mechanism of sedative causality of neuronal degeneration. There is also the significant question if these specific types of sedatives are harmful to brain injured patients.

References
