Predictive Value of the Bispectral Index for Burst Suppression on Diagnostic EEG During Drug-Induced Coma.

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Study Purpose

• Determine predictive value between bispectral index (BIS) and EEG in determining degree of burst suppression during drug-induced coma.

• Prospective, observational cohort study.

  ➢ 4 Consecutive patients receiving drug-induced coma for intracranial hypertension or status epilepticus.
Results

- 1,972 data sets/33 hours EEG/BIS monitoring.
- EEG burst count/BIS SR: Regression coefficient of 0.6673. EEG burst count and BIS SR: Spearman rank coefficient of 0.8727.
- EEG vs BIS burst count: Pearson's correlation coefficient 0.8256.
- BIS value versus EEG burst count: Spearman's rank coefficient 0.8810/Pearson's correlation coefficient of 0.6819.
Conclusions

• Statistical testing/graphing variables:
  - Strong correlation and predictive value during drug-induced coma.
  - Study supports using BIS, SR, and burst count to predict EEG supp. during drug-induced coma.

• Limitations:
  - Sample size-Limited ability to generalize results.
  - Homogenous study sample-Wider variability in injuries/ages needed to generalize results.
QUESTIONS???