Journal Symposium

A-1367 Gateway Ballroom 102, 10/17/00 9:00 AM–12:30 PM (JS)
Clinical Evaluation of EEG Complexity Measure for Depth of Anesthesia Estimation *Rob J. Roy, MD,D.Eng.Sc.; Xu-Sheng Zhang, PhD, Anesthesiology, Albany Medical College, Albany, NY, United States.* The Complexity measure C(n)was used to evaluate the Depth of Anesthesia with 27 patients using a wide variety of anesthetic regimes, and was found to be 93% accurate. This real time measure is highly robust.

A-1368 Gateway Ballroom 102, 10/17/00 9:00 AM–12:30 PM (JS)
Prediction of Depth of Sedation Induced by Sevoflurane and Propofol Using an Auditory Evoked Potential Index *Benno Rehberg, MD; Hans-Christian Wartenberg, MD; Ingobert Wenningmann, MD; Bernd W. Urban, PhD, Dept. of Anesthesia, University of Bonn, Bonn, Germany.* A simple calculated derivative of the MLAEP allows prediction of depth of sedation induced by propofol or sevoflurane

A-1369 Gateway Ballroom 102, 10/17/00 9:00 AM–12:30 PM (JS)
Entropy of the EEG Signal Is a Robust Index for Depth of Hypnosis *Hanna Viertio-Oja, PhD; Mika Sarkela, MSc; Pia Talja, MSc; Heli Tolvanen-Laakso, MSc; Arvi Yli-Hankala, MD, Research Unit, Datex-Ohmeda, Helsinki, Finland.* Entropy of EEG varies monotonously as a function of hypnotic depth. Entropy level for transition from consciousness to unconsciousness is independent of the patient.

A-1370 Gateway Ballroom 102, 10/17/00 9:00 AM–12:30 PM (JS)
Comparison of the BIS and the Auditory Evoked Potentials Index (AAI) during Propofol Anesthesia for Cardiac Surgery *Erik W. Jensen, PhD; Hector Litvan, MD; Pere Caminal, PhD; Jose Manuel Campos, MD; Juan Villar-Landeira, MD, Bioengineering, Polytech. of Catalunya, Barcelona, Spain.* The BIS and the AEP-index (AAI) was compared. The AAI detected better the transition from sleep to wake.

A-1371 Gateway Ballroom 102, 10/17/00 9:00 AM–12:30 PM (JS)
Awareness during Anesthesia with BIS Monitoring *Paul J. Manberg, Ph.D; David Zraket; Linda Kovitch; Laurie Christman, Aspect Medical Systems, Natick, MA, United States.* Intraoperative awareness during BIS monitoring can occur, but is usually associated with high BIS levels indicative of a light hypnotic state.

A-1372 Gateway Ballroom 102, 10/17/00 9:00 AM–12:30 PM (JS)
Non-Linear Indicators of Electroencephalographic Changes that Correlate with Changing Anesthetic Concentrations *Steven E. Kern, Ph.D.; Olinto J. Linares, M.S.; Talmage D. Egan, M.D., Department of Anesthesiology, University of Utah, Salt Lake City, UT, United States.* We used correlation dimension as a non-linear processing method to analyze the EEG of subjects at different levels of anesthesia.