1. Record Nr. UNINA9910254651803321 Monitoring the Nervous System for Anesthesiologists and Other Health Titolo Care Professionals / / edited by Antoun Koht, Tod B. Sloan, J. Richard **Toleikis** Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa **ISBN** 3-319-46542-2 Edizione [2nd ed. 2017.] 1 online resource (XXXVI, 722 p. 243 illus., 86 illus. in color.) Descrizione fisica Disciplina 617.96 Soggetti Anesthesiology Neurosurgery Pain medicine Pain Medicine Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto SECTION I. Monitoring Techniques -- 1. Somatosensory-Evoked Potentials -- 2. Transcranial Motor-Evoked Potentials -- 3. Auditory-Evoked Potentials -- 4. Visual-Evoked Potentials -- 5. Deep Brain Stimulation -- 6. Monitoring of Spinal Cord Functions -- 7. Electromyography -- 8. The Use of Reflex Responses for IOM -- 9. Brain and Spinal Cord Mapping -- 10. EEG Monitoring -- 11. Clinical Application of Raw and Processed EEG -- 12. A Guide to Central Nervous System Near-Infrared Spectroscopic Monitoring -- 13. Transcranial Doppler Ultrasound -- 14. Monitoring of Jugular Venous Oxygen Saturation -- 15. Intracranial Pressure Monitoring -- 16. IOM Instrumentation Layout and Electrical Interference -- 17. Signal Optimization in Intraoperative Neuromonitoring -- SECTION II. Anesthesia Considerations -- 18. Anesthesia for Awake Neurosurgery -- 19. Anesthesia Management and Intraoperative Electrophysiological Monitoring -- SECTION III. Clinical Applications -- 20. Monitoring Applications and Evaluating Changes -- 21. Intraoperative Neurophysiological Monitoring for Intracranial Aneurysm Surgery -- 22.

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## Sommario/riassunto

This widely praised, first-of-its-kind book has been thoroughly updated, expanded, and enriched with extensive new case material. illustrations, and link-outs to multimedia, practice guidelines, and more. Written and edited by outstanding world experts, this was the first and remains the leading single-source volume on intraoperative neurophysiological monitoring (IOM). It is aimed at graduate students and trainees, as well as members of the operative team, including anesthesiologists, technologists, neurophysiologists, surgeons, and nurses. Now commonplace in procedures that place the nervous system at risk, such as orthopedics, neurosurgery, otologic surgery, vascular surgery, and others, effective IOM requires an unusually high degree of coordination among members of the operative team. The purpose of the book is to help students, trainees, and team members acquire a better understanding of one another's roles and thereby to improve the quality of care and patient safety. From the reviews of the First Edition: "A welcome addition to reference works devoted to the expanding field of nervous system monitoring in the intraoperative period... will serve as a useful guide for many different health care professionals and particularly for anesthesiologists involved with this monitoring modality...An excellent reference...[and] a helpful guide both to the novice and to the developing expert in this field." Canadian Journal of Anesthesia "Impressive... [The book] is well written, indexed, and illustrated...The chapters are all extensively referenced. It is also very good value at the price....I would recommend this book to all residents and especially to all neuroanesthesiologists. It will make a worthwhile addition to their library." Journal of Neurosurgical Anesthesiology.