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Titolo	Epilepsy Surgery and Intrinsic Brain Tumor Surgery : A Practical Atlas // edited by Konstantinos Fountas, Eftychia Z. Kapsalaki
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ISBN	3-319-95918-2
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (303 pages)
Disciplina	617.481
Soggetti	Nervous system - Surgery Nervous system - Radiography Neurology Neuropsychology Cancer - Surgery Medical physics Radiation Neurosurgery Neuroradiology Surgical Oncology Medical and Radiation Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Preoperative Evaluation: Non-invasive Methods -- Neurological examination & semiology -- Interpretation of conventional anatomical MRI -- Interpretation of proton MR spectroscopic imaging? -- Fractional Anisotropy and Diffusion Tensor Imaging as preoperative tools -- Functional MRI -- Nuclear medicine as a preoperative tool -- PET CT/MRI as a preoperative tool -- Magneto-Encephalography and Magnetic Source Imaging as preoperative tools -- Surface Encephalography and video-Encephalography -- High-density Encephalography as preoperative tool -- Transcranial magnetic source stimulation as preoperative tool -- Preoperative neuropsychological evaluation -- Preoperative Evaluation: Invasive Methods -- Invasive Electroencephalography with subdural/depth electrodes -- Stereo-

Encephalography -- Extra-operative cortical stimulation and mapping -- Surgical Management: General considerations -- Intraoperative electrophysiological monitoring -- Awake procedures for cortical/subcortical mapping and monitoring -- Postoperative evaluation and follow-up -- Surgical Management: Epilepsy Surgical Procedures -- Neocortical resections -- Anterior temporal lobectomy and amygdalo-hippocampectomy -- Selective amygdalo-hippocampectomy -- Multiple subpial transections -- Corpus callosotomy -- Hemispherotomy -- Vagus nerve stimulation -- Deep brain stimulation -- Cortical stimulation -- G-knife in epilepsy -- Cyberknife in epilepsy -- Novel focal treatment modalities in epilepsy -- Surgical Management: Intrinsic Tumor Surgical Procedures -- Surgical resection techniques of frontal lobe tumors -- Surgical resection techniques of temporal lobe tumors -- Surgical resection techniques of central area tumors -- Surgical resection techniques of parietal lobe tumors -- Surgical resection techniques of occipital lobe tumors -- Surgical resection techniques of insular tumors -- Adjuvant treatment for intrinsic brain tumors -- Local interstitial chemotherapy -- Local interstitial brachytherapy -- External radiation therapy -- Adjuvant stereotactic radiosurgery -- Systematic chemotherapy in intrinsic brain tumors -- Novel adjuvant focal therapies -- Monitoring for tumor recurrence -- Management of tumor recurrence.

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### Sommario/riassunto

This book provides a comprehensive and practical guide for the safe and efficient management of patients with intrinsic brain tumors and medically intractable epilepsy. It presents in an easily understandable way the preoperative evaluation of these patients, starting from the clinical interpretation of conventional anatomical MR imaging and analyses the clinical significance of newer MR based imaging techniques such as diffusion and perfusion imaging. It demonstrates with clarity the role of MR spectroscopy and fractional anisotropy and diffusion tensor imaging in the preoperative assessment of these patients and how this data can be incorporated into the surgical planning. This book is aimed at neurosurgeons, neuroradiologists, neurologists, and epileptologists, and may also be of interest to neuropsychologists, neurophysiologists, radiation oncologists, and medical physicists.

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