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Titolo Principles and Practice of Stereotactic Radiosurgery / / edited by

Lawrence S. Chin, William F. Regine

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Soggetti Surgery

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Lingua di pubblicazione Inglese

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Livello bibliografico Monografia

Note generali Description based upon print version of record.

Nota di bibliografia Includes bibliographical references at the end of each chapters and

index.

Nota di contenuto Introduction -- History of Stereotactic Radiosurgery -- Imaging and

Treatment and Follow-up in Stereotactic Radiosurgery -- Techniques of Stereotactic Neurosurgery -- Radiation Biology and Physics -- The Physics of Stereotactic Radiosurgery -- Radiobiology Principles of Stereotactic Radiosurgery -- Experimental Radiosurgery Models -- Treatment Planning -- Designing and Building a Radiosurgery Unit -- Stereotactic Radiosurgery Techniques -- Gamma Knife -- LINAC -- Charged Particle -- Cyberknife -- GammaPod -- Treatment of Disease Types -- Metastatic Brain Tumors -- Glial Tumors -- Meningiomas -- Acoustic Tumors -- Pituitary Tumors -- Pediatric Disorders -- Pineal Region Tumors -- Skull Base Tumors -- Head and Neck Tumor -- Spinal Tumors -- Arteriovenous Malformations -- Cavernous Malformations and other Vascular Abnormalities -- Trigeminal Neuralgia -- Movement Disorder -- Psychiatric and Pain Disorders -- Epilepsy -- Ocular and Orbital -- Extracranial Radiosurgery -- Patient

Sommario/riassunto

Care and Socio-Economic Issues -- Complication Management in Radiosurgery -- Cost Effectiveness and Quality of Life.

Principles and Practice of Stereotactic Radiosurgery (SRS), Second Edition aims to serve as the definitive reference textbook for SRS practitioners. It provides a theoretical basis for the use of therapeutic SRS including imaging techniques and radiobiology. The bulk of the textbook contains chapters that are comprehensive in scope on all diseases that are treated by SRS. Lastly, it addresses administrative and technical aspects of running an SRS unit. Each chapter provides an expansive treatment of the subject. Emphasis is placed on the technical aspects of SRS so that practitioners in this field will use it as a daily reference. Each subject is presented by historical context, then by its pathophysiology. Current treatment methods and results are addressed in depth. A liberal use of tables and figures enhance the presentation. A review of all major clinical studies and representative case presentations, where possible, are provided with imaging, treatment planning, and follow-up results. Each chapter is followed by one or two mini-chapters that provide a counter-viewpoint experience to the main chapter, which is oriented to SRS. These counter-viewpoint chapters are written by a noted expert in that field and address in greater detail the indications, results, and complications of their approach to the disease discussed in the main chapter. Principles and Practice of Stereotactic Radiosurgery, Second Edition is the only reference needed for neurosurgeons, radiation oncologists, and medical physicists at all levels of training and practice who are interested in SRS. .