Record Nr. UNINA9910300443203321 Adult CNS Radiation Oncology: Principles and Practice / / edited by Eric **Titolo** L. Chang, Paul D. Brown, Simon S. Lo, Arjun Sahgal, John H. Suh Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-42878-0 Edizione [1st ed. 2018.] 1 online resource (XXI, 766 p. 349 illus., 257 illus. in color.) Descrizione fisica 616.994810642 Disciplina Soggetti Radiotherapy Oncology Neurosurgery Oncology Lingua di pubblicazione Inglese Formato Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Meningioma -- Pituitary Adenoma: Overview and Treatment Nota di contenuto Approaches -- Craniopharyngioma -- Vestibular Schwannoma -- Low Grade Glioma -- High Grade Gliomas -- Schwannomas and Neurofibromas -- Spinal Meningioma -- Astrocytic Tumors of Spinal Cord -- Spinal Cord Ependymoma -- Metastatic Epidural Spinal Cord Compression: Conventional Radiotherapy -- Vertebral Body Metastasis -- Evaluation and Workup of Leptomeningeal Disease -- Palliative Radiation Therapy for Leptomeningeal Disease -- Optic Pathway Gliomas -- Optic Nerve Sheath Meningioma -- Uveal Melanoma --Skull Base Tumors -- Combined Modality Therapy for Primary Central Nervous System Lymphoma -- Choroid Plexus Tumors --Hemangiopericytoma -- Stereotactic Radiosurgery for Hemangioblastomas -- NF2 Related Tumors and Malignant Peripheral Nerve Sheath Tumors -- Germ Cell Tumors -- Pineal Region Tumors --Glomus Tumors -- Adult Medulloblastoma -- Intracranial Ependymoma -- Central Neurocytoma -- Prognostic Classification Systems for Brain Metastases -- Neurosurgical Management of Single Brain Metastases --Multiple Brain Metastases -- Postoperative Treatment for Brain Metastasis -- Vascular Malformation Radiosurgery -- Adult CNS

Radiation Oncology: Trigeminal Neuralgia -- Brain Radionecrosis --

Spinal Cord Tolerance and Risk of Radiation Myelopathy -- Radiation Optic Neuropathy -- Cerebral Atrophy and Leukoencephalopathy Following Cranial Irradiation -- Hypopituitarism -- Neurocognitive Changes -- Cranial Nerve Palsies, Vascular Damage, and Brainstem Injury -- Conformal Therapy and Intensity Modulated Radiation Therapy/Volumetric Modulated Arc Therapy -- Linac Based Stereotactic Radiosurgery and Hypofractionated Stereotactic Radiotherapy -- Gamma Knife® Stereotactic Radiosurgery and Hypo-Fractionated Stereototatic Radiotherapy -- Spinal Stereotactic Body Radiotherapy -- Proton Beam Therapy (For CNS Tumors) -- Brachytherapy.

Sommario/riassunto

This book elucidates the radiation therapy protocols and procedures for the management of adult patients presenting with primary benign and malignant central nervous system tumors. With the development of new treatment strategies and rapid advancement of radiation technology, it is crucial for radiation oncologists to maintain and refine their knowledge and skills. Dedicated exclusively to adult CNS radiation oncology, this textbook explores CNS tumors ranging from the common to the esoteric as well as secondary cancers of metastatic origin. The first half of the book is organized anatomically: tumors of the brain, spinal cord, leptomeninges, optic pathway, ocular choroid, and skull base. The second half covers primary CNS lymphoma, rare CNS tumors, metastatic brain disease, vascular conditions of the CNS, radiation-associated complications, and radiation modalities. Each chapter provides guidance on treatment field design, target delineation, and normal critical structure tolerance constraints in the context of the disease being treated. Learning objectives, case studies, and Maintenance of Certification Self-Assessment Continuing Medical Education-style questions and answers are incorporated throughout the book. This is an ideal guide for radiation oncologists, residents, and fellows, but medical students may also find value in the text.