Record Nr. UNINA9910300072703321 Autore Zakharova Natalia Titolo Neuroimaging of Traumatic Brain Injury [[electronic resource] /] / by Natalia Zakharova, Valery Kornienko, Alexander Potapov, Igor Pronin Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2014 **ISBN** 3-319-04355-2 Edizione [1st ed. 2014.] 1 online resource (170 p.) Descrizione fisica 610 Disciplina 616.07548 616.0757 616.8 Soggetti Neuroradiology Neurosurgery Neurology Nuclear medicine Neurology **Nuclear Medicine** Lingua di pubblicazione Inglese **Formato** Materiale a stampa 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 Clinical and prognostic value of neuroimaging in traumatic brain injury. - Clinical evaluation and neuroimaging technologies.- Neuroimaging classification of traumatic brain injury -- Dynamic study of white matter fiber tracts after traumatic brain injury -- Mapping of cerebral blood flow in focal and diffuse brain injury.- Dynamics of hemispheric and brain stem cerebral blood flow -- Conclusion. Sommario/riassunto The main purpose of this book is to present emerging neuroimaging data in order to define the role of primary and secondary structural and hemodynamic disturbances in different phases of traumatic brain injury (TBI) and to analyze the potential of diffusion tensor MRI, tractography and CT perfusion imaging in evaluating the dynamics of TBI. The authors present a new MRI classification of brain stem and hemispheric

cortical/subcortical damage localization that is of significant prognostic

value. New data are provided regarding the pathogenesis and dynamics of diffuse and focal brain injuries and qualitative and quantitative changes in the brain white matter tracts. It is shown that diffuse axonal injury can be considered a clinical model of multidimensional "split brain" with commissural, association and projection fiber disorders. The book will be of interest for neuroradiologists, neurosurgeons, neurologists and others with an interest in the subject.