Brain Neurotrauma: Molecular, Neuropsychological, and Rehabilitation Aspects

Brain Neurotrauma, edited by Dr Firas H. Kobeissy, is a comprehensive textbook of molecular aspects of brain trauma. There are over 119 contributing authors from numerous renowned international centres. The volume is well laid-out and has eight sections, divided into 49 chapters. These cover in extensive detail the basic science, the experimental models and the neurorehabilitative management of patients following brain injury. There is good discussion of the mechanics of brain injury, of experimental brain injuries and brain recovery models, biomarkers and also the aftereffects of brain injury. The book also gives insight into various potential treatments and various treatment targets for the future, providing a much needed ray of hope for the reader.

The book is a comprehensive guide to current knowledge of pathophysiology, and the molecular and clinical aspects of brain injury. There is an effort, largely successful, to cover all the aspects of traumatic brain injury causative models, neuromechanics, imaging, biomarkers, neurocognitive and neurobehavioural aspects, and potential targets to enhance recovery following traumatic brain injury. The sections on the after-effects of mild brain injuries and sports injuries were very helpful additions. Neuro-rehabilitation and neuroprotection strategies such as non-invasive stimulation of brain or cranial nerves are especially interesting to me as a neuro-rehabilitation physician, and to my multidisciplinary team colleagues.

Clinicians will be enlightened to read about nanopeptides, roles for stem cells and the effects of comorbid conditions on recovery patterns following brain injury. In these cutting-edge topics, the comprehensive referencing is of course especially useful.

The clinician in search of enlightenment might have been helped along, however, if the authors had made more use of tables, colours and diagrams to illustrate the complex information. On the one hand, the book benefits from having a subspecialist interest in Neuro- oncology, I would recommend the additional purchase of the excellent ‘Controversies in Neuro-Oncology’ also published by Thieme, which complements this book and offers the reader full insight into the more controversial topics not covered by the Essentials.'