Restorative Neurology of Spinal Cord Injury

Edited by Milan R. Dimitrijevic, Byron A. Kakulas, W. Barry McKay, and Gerta Vrbová

Following injury or disease, neural circuitry can be altered, leading to highly individualized characteristics that may or may not resemble original function. To date, the majority of approaches used to treat neurological dysfunction have focused on the replacement of lost or damaged function. Restorative Neurology of Spinal Cord Injury offers a new and novel approach.

Focusing on the spinal cord and its role in motor control, this book details the clinical and neurophysiological assessment methods developed throughout the past half-century, as well as the conduction and processing performed within the surviving neural circuitry. Based on the results of such assessment, treatment strategies are applied to augment, rather than replace, the performance of surviving neural circuitry and improve the functional capacity of people who have experienced spinal cord injury.

“This 'state of the art' book on restorative neurology of spinal cord injury deals with an interesting and timely topic...The last decade has seen an impressive evolution from the important but limited clinico-pathological correlations to a list of evaluations and interventions...This book gives a good overview of all that has become available for treatment and research. It illustrates how this knowledge can be clinically put into practice. The evolution will not stop today and it is certain that further steps will be made in the new perspective presented here, for the benefit of those who suffer such injury.”

- Jean Jacques Wyndaele, Department of Urology, Antwerp University and Antwerp University Hospital, Belgium

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