

## NEUROLOGÍA



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BOOK REVIEW

Estimulación magnética transcraneal y neuromodulación. Presente y futuro en neurociencias. Isaac Túnez Fiñana, Álvaro Pascual Leone. ISBN: 9788490224977.



The publication of *Estimulación magnética transcraneal* y neuromodulación [Transcranial magnetic stimulation and

neuromodulation] is good news for many reasons. First of all, this is the first Spanish-language monograph to address this neurophysiology technique, and it will certainly help clarify basic concepts in what is an extremely technical discipline with a complex physical basis. It is intended for doctors in training with an interest in both the biological and clinical aspects of TCMS.

Many of the contributors enjoy international prestige in this field and most of the chapters are written by experts. In addition to presenting their topics, these chapters reflect the depth of knowledge that stems from practical experience; they also contain references to recent research projects by different teams, as well as a meticulous and up-to-date review of the literature.

The first section is highly interesting and focuses essentially on basic science. Its topics include the action mechanisms in TCMS; the biological effects, at the cellular level, of magnetic stimulation in vitro and in animal models; and the effect of neuromodulation and plasticity on neuronal networks. The subsequent chapters examine the clinical applications of TCMS, which is used both in diagnosing numerous diseases (especially neurodegenerative diseases, psychiatric disorders, cerebrovascular diseases, and spinal cord lesions) and in studying functional recovery processes or the pathophysiology of different disorders. I should also highlight the chapters that present such cutting-edge subjects as applying static magnetic stimulation and integrating TCMS with imaging techniques. If the book has a weak point, it is that it lacks a specific chapter on instruments and methods (although much information about excitability studies has been provided in the chapter on spinal cord lesions). Since the book is based on lectures presented in a course on TCMS and neuromodulation, the introductions to each of the chapters are understandably somewhat redundant. In summary, this text is recommended reading for professionals (mainly neurologists, neurophysiologists, and psychiatrists) who require a firm grounding in TCMS for their daily clinical practice. It will also be valuable for any neuroscientists with an interest in learning about the underlying mechanisms in TCMS.

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