Marc Sindou, George Georgoulis, Patrick Mertens: Neurosurgery for spasticity. A practical guide for treating children and adults

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Very few medical centers in the world have acquired the multidisciplinary experience in the treatment of spasticity which has been gained at the Department of Neurosurgery of Lyon 1, Hopital Neurologique Pierre Wertheimer under the guide of Prof. Marc Sindou. Now, such an experience is available to all of us, thanks to this readable and elegant book Prof. Sindou wrote together with his coworkers George Georgoulis and Patrick Mertens. Indeed, the book reports in a synthetic and practical way what the authors have learned from surgical operations performed on more than a thousand of patients, both children and adults. However, the book does not focus on the mere personal experience of the authors and the other allied specialists involved in the management of spasticity. Actually, it also exposes the concepts and the knowledge internationally acquired in more than 100 years in an extremely didactic way, starting from the pioneer experiments by the British physiologist Sherrington on decerebrate animals, which demonstrated the hyperexcitability of the stretch reflex related to the loss of inhibitory influences from descending supraspinal structures, and the subsequent translation of the experimental data into the clinical practice by Foerster, who in 1908 performed the first lumbosacral rhizotomy for treating lower limb spasticity. In fact, an exhaustive chapter, which will delight those surgeons planning to be involved in the management of the condition as well as those already expert in the field, is devoted to the history of neurosurgical treatment of spasticity from the pioneer experimental works to the various surgical procedures on the peripheral nerves, spinal roots, spinal cord, and dorsal root entry zone without omitting the more modern lesional techniques using stereotactic approaches

and the alternative medical treatment based on intrathecal infusion of baclofen or the use of botulinic toxin.

A concise but illustrative chapter on the anatomical and physiological base of motricity applied to the study of spasticity completes the introductory part of the book, the core of which is constituted by two further sections specifically devoted to the adult and the pediatric population, respectively. Both these sections are introduced by a chapter aimed at defining the clinical manifestations and the clinical pattern of spasticity in these specific age groups with a rich contribution of figures and schemes aimed at facilitating the identification of the involved muscles, nerves, and roots. The scales internationally utilized for quantifying the degree of the functional disorders are extensively illustrated in these two chapters as well. The decision-making process is dealt with particular attention separately in Chap. 5 for the adult patients and in Chap. 12 for the children, considering the specific characteristics of the two populations. As expected for a neurosurgical book, the various available surgical techniques are detailed with numerous illustrative surgical pictures which make it easy for the reader to understand the single steps. Finally, further chapters describe the orthopedic surgical procedures and the management of hyperactive bladder. At the end of the book, a useful appendix summarizes all the information necessary for establishing the surgical plan.

The authors should be congratulated for having added to the medical literature this excellent textbook which may contribute significantly to a major and more appropriate utilization of the surgical procedures in the management of spasticity, both in adults and children. The practical attitude the authors demonstrated is going to invite residents to read the book that would enable them to know better about this fascinating branch of neurosurgery as well as those specialized already deeply engaged in this type of treatment.

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