

## Advances and Technical Standards in Neurosurgery Vol. 37

Pickard J, Akalan N, Rocco C, (978-3-7091-0672-3)

Nicolas de Tribolet

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This series of books publishes chapters written by experts in their field, invited by the Editorial Board. Since the authors are not limited by space they can cover their topic comprehensively and provide us with an extensive list of references. The print and the figures are of excellent quality. These books provide optimal continuous training.

The first part on advances contains four chapters:

1. The neuroscientific foundations of free will.  
Z.H. Rappaport  
This is a very interesting attempt at correlating philosophy with our present knowledge in neurosciences: neurophysiology, neuroanatomy, neuropsychology and neurosurgery.
2. Functional exploration for neuropathic pain.  
J. Maarrawi, P. Mertens, R. Peyron, L. Garcia-Larrea, M. Sindou  
This chapter gives indepth information on the neurophysiological studies, functional and metabolic imaging of neuropathic pain including CBF and opioid receptor studies using PET.
3. Experimental reconstruction of the injured spinal cord.  
A. Hejcl, P. Jendelova, E. Sykova  
Here we are presented with the various methods of spinal cord injury repair: neurotrophic factors, neutralizing inhibitory factors, activated macrophages, cellular

therapies including stem cells, and bridging therapies. Finally, ongoing clinical studies are presented.

4. Advances in videoassisted anterior surgical approach to the craniovertebral junction.

M. Visocchi

After a brief recall of the classic transoral microsurgical approach, the endonasal, transoral and transcervical endoscopic procedures are described.

The second part on technical standards contains three chapters:

1. Myelomeningocele (open spina bifida) surgical management.  
N. Akalan  
This is a nicely illustrated text containing incidence, etiology, embryology, clinical presentation, and surgical treatment including in-utero repair.
2. Chiari type 1 malformation in children.  
L. Massimi, F. Novegno, C Di Rocco  
I found this chapter particularly informative. After the various hypotheses on pathogenesis are discussed the clinical presentation, diagnostic features and surgical management are presented.
3. Treatment of infections of the spine  
M. Stoffel, C. Stürer, F. Ringel, B. Meyer  
This is a very clear presentation of the topic including epidemiology, diagnosis, nonsurgical and surgical treatment and prevention. At the end the authors ask the questions that remain to be answered by prospective studies.

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N. de Tribolet (✉)  
University of Geneva, Clinical Neurosciences,  
Cour St Pierre 7,  
Geneva 1204, Switzerland  
e-mail: Nicolas.DeTribolet@unige.ch

**Conflict of interest** None.