

*Michael J. Avram, Ph.D., Editor*

**Atlas of Implantable Therapies for Pain Management.** Edited by Timothy R. Deer, M.D. New York, Springer Science and Business Media, 2011. Pages: 228. Price: \$129.00.

Our current understanding of neuromodulation and pharmacology has yielded several advances in the field of pain medicine. The use of implantable devices for pain management has significantly increased the number of treatment options available to patients living with chronic pain. The general categories for such devices include neurostimulation and drug-delivery systems. Neuromodulation provides patients sustained pain relief and an alternative to the ill effects of long-term opioid use; intrathecal pumps provide a higher degree of effectiveness of medications compared with other more traditional routes of administration. The *Atlas of Implantable Therapies for Pain Management* is a clear and concise technical guide that focuses on the practical application of these therapeutic modalities.

The *Atlas of Implantable Therapies for Pain Management* is arranged in four primary sections. The first three focus on neurostimulation of the spine, the peripheral nervous system, and the head, and they begin with a preface that outlines a brief historical background providing the reader with an interesting account of their origin and their influence on the devices we use today. The necessary basics of indications for implantation and patient selection are subsequently addressed. This is followed by a description of each procedure in the various applications of these devices. The last section moves on to address drug delivery systems in the chronic pain patient.

The authors discuss the technical aspects of each procedure on a step-by-step basis. Specifically, they outline placement, tunneling, anchoring, and pocketing for each implantable device and procedure. This is supplemented by a plethora of images and x-ray films, which lead the reader through the procedural details in an exquisitely precise manner. Images include the optimal angle of needle insertion during lead placement, the suture configuration for strong anchoring, and visual examples of intraoperative pitfalls. Finally, the authors emphasize the common risks at each stage. Multiple sections are dedicated to complications and their management, a testament to the thoroughness and practicality of this book.

In addition to discussing the basic concepts, this book includes advanced applications and techniques of

neuromodulation. It details procedures, such as retrograde electrode insertion, deep brain stimulation, and the use of electromyography/somatosensory evoked potentials monitoring for spinal cord mapping and appropriate lead placement. Furthermore, few texts address device management postimplantation. With regard to nerve stimulation, the text touches on programming principles to achieve the desired therapeutic effect, a subject that is often overlooked. With respect to intrathecal pumps, proper drug selection is outlined, as is continued delivery maintenance.

Despite its technical nature, one of the most notable features of the text is the authors' abilities to direct even a novice practitioner, with the aid of descriptive illustrations and summary tables in each chapter. These illustrations constitute a unique feature of this textbook and strongly affirm its superiority over other excellent books on this topic. This atlas would be most helpful not only for a pain-management fellow early in training but also for any provider trying to improve his/her technique.

In summary, the *Atlas of Implantable Therapies for Pain Management* is a practical, extremely thorough, and well-organized guide for the pain physician. It touches on all of the salient features of implantable devices, focusing on technical skills crucial to interventional pain therapies. We are certain that the pain community will welcome this book with enthusiasm and will undoubtedly benefit from such a complete and comprehensive textbook. The authors of this book are to be commended for their valuable and unprecedented contribution. We strongly recommend it to all the pain physicians who perform implantable therapies for chronic pain management.

**Cristina Bartis, M.D., Jay Bhatla, M.D., Gina Votta Velis, M.D., Ph.D.,\*** \*University of Illinois, Chicago, Illinois. ginavot@gmail.com

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**Core Topics in Neuroanesthesia and Neurointensive Care.** Edited by Basil F. Matta, M.D., David K. Menon, F.R.C.A., Martin Smith, M.B.B.S., F.R.C.A. New York, Cambridge University Press, 2011. Pages: 534. Price: \$125.00.

I have a confession to make ... Neuroanesthesiology is my first love! There you go, I said it!

So I really had my "neurotransmitters" in overdrive mode when I got the opportunity to review *Core Topics in Neuroanesthesia and Neurointensive Care*, by Dr. Matta and his team. Unlike many other specialized fields of modern medicine,