

## Book Reviews

### New Balanced Anesthesia

Edited by K. Mori, A. Ohmura, H. Toyooka, Y. Hatano, K. Shingu, K. Fukuda. Available from Elsevier Science BV, P.O. Box 211, 1000 AE Amsterdam, The Netherlands, or from Elsevier Science Inc., P.O. Box 945, Madison Square Station, New York, NY 10160-0757, USA. Price: US\$184.00. ISBN: 0-444-50009-X.

This book is based on the proceedings of the 1st Congress of the Asian and Oceanic Society for Intravenous Anesthesia. The congress was held in Kyoto in February 1998. It is a hardcover book, consisting of 380 pages and divided into four sections. The first 70 pages are lectures given by the editors, who were all invited based on their interest in the neuroscience field, or on their work on molecular and cellular biology as it relates to anesthesia and its drugs. The second 40 pages are based on two symposia—one on the prediction of the depth of anesthesia, and the second on the role of alpha-2-adrenoreceptor agonists in clinical anesthesia. The third section (20 pages) is based on international forums on the current status and future direction of anesthesia practice in the authors' own countries. The last 270 pages are poster presentations on intravenous-based anesthesia, and on the effect of intravenous-administered anesthesia drugs.

In general, the book argues the need for a new approach to balanced anesthesia, to totally block the surgical stress response in its sympathetic, hormonal, and immunological forms. The authors argue that this cannot be achieved by the nonspecific action of the commonly used volatile agents, which target the hydrophobic side of the cellular membrane protein molecules, and work in the same way on all the human body cells with no clear targeted receptors. The authors emphasize the new molecular and cellular biology-based approach to anesthesia, in which the new balanced anesthesia is achieved by administering moleculobiology-based, pinpoint targeted, receptor-oriented drugs, and not simply by attenuating the blood pressure and heart rate response to the surgical stimuli. In this approach, the so-called general anesthetics will lose their role as the major anesthetic drugs and will become a supplement to the combination of receptor-oriented drugs.

Although some of the book presentations are of use only to a small number of anesthesiologists (those with good molecular biology background), I believe that the majority of its presentations may have some appeal to the general anesthesiologist. It will definitely appeal to the group of anesthesiologists who prefer total IV anesthesia techniques.

I found some of the book presentations to be outstanding, but the book in general did not fully meet my expectations, given the listed price.

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### Spiral CT: Principles, Techniques and Clinical Applications

Edited by Eliot K. Fishman and R. Brooke Jeffrey, Jr. 448 pages. Publication: June 1998. Lippincott Williams & Wilkins, 227 East Washington Square, Philadelphia, PA 19106, USA. Price: US\$143.00. ISBN: 0-7817-1251-3.

Since it was first described in 1989, spiral, helical, or "slip-ring" computer tomography (CT) has rapidly become a standard technique of sectional imaging. The second edition of *Spiral CT: Principles, Techniques and Clinical Applications* by Eliot K. Fishman and R. Brooke Jeffrey, Jr., contains a wholesome description of the basic, the routine and the state-of-the-art clinical application of spiral CT. The book is divided into six parts and twenty-one chapters.

Seventeen of these chapters describe spiral CT in the diseases of the chest, gastrointestinal system, genitourinary tract and other assorted clinical applications. A complete section of 80 pages is devoted to spiral CT angiography, appropriate attention to a very rapidly expanding use of spiral CT in the current clinical practice. Some of the most advanced image processing techniques, including 3-D imaging, virtual endoscopy, and volume rendering, are well described in the relevant chapters. The color plates of the reconstructed and virtual reality imaging highlight the state-of-the-art application of spiral CT. The authors have illustrated the book generously with the 3-D reconstructed surface-rendered and volume-rendered images in many sections of the book. Virtual reality imaging is the newest application of the spiral CT that appeared in journal articles less than a year ago. The clear and concise text is well illustrated with high-quality CT images. The text is well referenced.

The book is entirely clinically oriented, addressing in detail the day-to-day use of spiral CT, depicting the role of CT compared with MR and other modalities in various disease processes.

This book is a treasure of information addressing all aspects of spiral CT with its latest applications. It is a must-read for residents and consultant physicians alike, including subspecialists in their own fields within radiology and clinical medicine. This second edition on

spiral CT should be part of all medical libraries and collections of books in the Departments of Radiology.

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### Computer Assisted Radiology in Surgery

Edited by H.U. Lemke, M.W. Vannier, K. Inamura and A.G. Farman. Available from Elsevier Science BV, P.O. Box 211, 1000 AE Amsterdam, The Netherlands, or from Elsevier Science Inc., P.O. Box 945, Madison Square Station, New York, NY 10160-0757, USA. Price: US\$310.00. ISBN: 0-444-82973-3.

This nearly thousand page text consists of 16 sections dealing with cutting edge radiological and computer technology. The book is based on the proceedings of the 12th International Symposium on Computer Assisted Radiology and Surgery Exhibition, held in Tokyo from 24-27 June 1998.

This publication is in fact a collection of several books on every aspect of recent development and future directions of modern-day computer assisted radiology techniques and departmental management. The book can serve as a reference for subspecialists in neuroradiology, abdominal imaging, thoracic imaging, and musculoskeletal radiologists. Researchers can find many leads to research projects in several aspects of radiology, such as data acquisition, image processing, including 2D, 3D and volume rendering leading to virtual endoscopy. There is enough information covered in several chapters to enable radiologists and administrators to put together most modern filmless departments of radiology and a digital hospital. Several new technologies have been introduced, including those of Cone Beam Computer Tomography, using a video fluoroscopic system providing instant 3D images for diagnosis and interventions.

About 200 pages have been devoted to computer-aided surgery in the head and neck, orthopedic surgery, surgical instrumentation and robotics and minimally invasive medicine. This section is probably the largest collection of such articles in one place and has important clinical, theoretical, practical and research implications. The sections on computer assisted diagnosis and surgical instrumentation and robotics, in particular, deal with technology that is still in the developmental stage and not available or approved for clinical use.

In summary, this book can be regarded as an encyclopedia of modern technology as it is applicable to radiology, radiation therapy, simulated surgery, and hospital information systems, filmless departments,

computers in medicine and established management of a future department of radiology. The proceedings of the 12th International Symposium on Computer Assisted Radiology and Surgery should definitely be part of departmental institutional libraries. All physicians and technical departmental heads of radiology should have easy day-to-day access to this reference book if they are to steer their departments through the maze of new technology in the new millennium.

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### Advances in the Prevention of Occupational Respiratory Diseases

Edited by Keizo Chiyotani, Yutaka Hosoda and Yoshiharu Aizawa. Available from Elsevier Science BV, P.O. Box 211, 1000 AE Amsterdam, The Netherlands, or from Elsevier Science Inc., P.O. Box 945, Madison Square Station, New York, NY 10160-0757, USA. Price: US\$296.00. ISBN: 0-444-82791-9.

This book is a compilation of the studies and abstracts/research presented at the 9th International Conference on Occupational Respiratory Diseases (9th ICORD). It deals with occupational exposures in all aspects of industrial materials and associated human respiratory problems. As well, several research studies on exposure-related lung diseases in animal models are included in the book. The book practically covers all the relevant information on industrial particle and chemical exposures. It deals at length with the exposure to silica, and asbestos-related lung damage.

*Advances in the Prevention of Occupational Respiratory Diseases* presents good clinical and research material information for medical students, clinicians and researchers interested in occupational lung diseases. The book is nicely organized for review and the language used is simple and easily understood.

Valuable information is available on exposure-related lung damage, preventive measures, and new radiological advances in its diagnosis. The authors of the book are to be commended for compiling this valuable information. I believe it is a valuable addition to current information on occupational lung diseases.

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