

Book reviews

Oxygen Transport. Principles and Practice.

J.D. Edwards, W.C. Shoemaker, J.-L. Vincent (Eds.).
W.B. Saunders Company Ltd., London, England. 1993.
367 pages. ISBN 0-7020-1576-8 \$59.00 (U.S.)

This monograph seeks to summarize current knowledge of the pathophysiology and management of disorders of oxygen transport associated with various forms of critical illness, such as hypovolaemic and cardiogenic shock, sepsis, trauma and ARDS. It purports to present a "fresh look at these critical illnesses" in which the focus of management extends beyond the maintenance of normal vital signs, blood gas values, etc. to the support of measured rates of oxygen delivery to the tissues. Underlying this proposed new approach are two concepts: (1) that the risks of multi-organ failure and/or death from critical illness relate to a pathological dependency of tissue oxygen uptake ($\dot{V}O_2$) on the rate of O_2 delivery to the tissues (DO_2) and (2) that interventions which increase O_2 delivery to supranormal values decrease these risks.

The text is divided into two parts. The first part, entitled "Principles," reviews pertinent physiology and pathophysiology; introduces the new concepts (*vide supra*); and describes various methods to measure oxygen delivery and utilization in clinical practice. The second part, entitled "Practice," considers interventions that can be used to support or augment oxygen transport in the context of individual types of critical illness.

The quality of this book is uneven. In the section devoted to "Principles," several chapters suffer from poor organization, an unnecessarily complex presentation and, in some cases, factual errors. In the section entitled "Practice," the chapters that address cardiogenic shock and septic shock are informative reviews, but most other chapters recite material that is better presented elsewhere. The basic tenets upon which most of the text is based – i.e., the existence of pathological oxygen supply dependency and the therapeutic benefit of supranormal oxygen delivery – are presented primarily as accepted facts rather than as the controversial hypotheses that they are. In addition, the text is marred by typographical errors, mislabelling of figures and a high rate of repetition of the same material.

To manage tissue oxygenation successfully in the presence of critical illness, clinicians may need to direct more detailed attention to the events of oxygen transport beyond the lungs. To the extent that this book reminds us of this need, it is useful. Unfortunately, however, its

overall contents do not represent a well-balanced, authoritative review of this subject.

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Current and Emerging Issues in Cancer Pain: Research and Practice

C. Richard Chapman, Kathleen M. Foley (Eds.). Raven Press, 1993, ISBN 0-7817-0007-8. 461 p. \$140.00 (US)

This book is a summary of the presentations made at the third annual Bristol-Myers Squibb Symposium on Pain Research. The symposium was chaired by Dr. John J. Bonica, to whom the book is dedicated. The purpose was to stimulate discussion on "leading-edge research in the cause and management of pain."

There are 26 chapters from 39 contributing authors. There is international representation, with six contributing authors from France and one from the United Kingdom; none are from Canada. The remaining 32 contributing authors are from the United States.

The book represents a very broad multidisciplinary description of the aetiology and treatment of cancer pain. The interdisciplinary flavour is illustrated by the department affiliations of the contributing authors: physiology, pharmacology, anatomy, nursing, psychology, psychiatry, neurology, rehabilitation medicine, oncology, paediatrics, dentistry, maxillofacial surgery, anaesthesia, and critical care. Many of the authors are career scientists. Of the 39 contributing authors only four have anaesthesia affiliations and two of those are PhDs. The topics covered by these four authors include emotional aspects of pain, quality of life, methodological challenges for clinical trials, neuropathic pain and pharmacological mechanisms of pain modulation.

Considering the affiliations of the contributing authors, it is not surprising that this book does not cover the typical areas of interest for clinical anaesthetists such as postoperative pain, opioid infusions, patient-controlled analgesia or epidural analgesia. The book is not for the anaesthetist with a casual interest in cancer pain, but rather for the chronic pain specialist. There are entire chapters devoted to managing depression, suicide risk, ethical issues, and integration of medical and psychological therapy for the cancer patient. While much of the book details the physiology and pharmacology of

pain, 40% of the chapters deal with the behavioural, psychosocial aspects of chronic cancer pain.

There are several chapters on fundamental principles of pain management. These describe the somatic and visceral pain mechanisms, opioid pharmacology and opioid receptors, and the pharmacokinetics and pharmacodynamics of opioid analgesics. These chapters are extremely detailed, with ample figures, tables and charts. The bibliographies are exhaustive and current. There are also several unique chapters which describe the methodological problems and pitfalls associated with clinical pain studies. The issue of placebo therapy is discussed and the importance of outcome measurements and their subsequent evaluation is highlighted. While the emphasis is on the study of cancer pain, much of the methodology also applies to acute postoperative pain.

In summary this is an excellent multidisciplinary compilation of the current and emerging issues in cancer pain. The book would be a valuable reference for chronic pain clinics and a worthy addition to anaesthesia libraries.

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The Management of Chronic Pain

A.W. Diamond, S.W. Coniam. Oxford University Press, New York. 1991. 172 pp. ISBN 0-19-263002-4. \$54.00 (Cdn)

In the preface, the authors state that the book is about chronic pain management particularly in the pain clinic environment. It is focused at physicians training in pain management. The book consists of eleven chapters written in a conversational style, which require the reader to read the complete chapter to gain the fundamentals and specifics that exist within the text. Each chapter is referenced although few of the references were current when the book was first published. The first chapter gives an interesting historical perspective and describes the evolution of pain clinics but omits discussing the trend towards multidisciplinary pain management. In describing pain perception, the authors made no reference to the current theories involving spinal cord plasticity, which is a serious omission as this could change our clinical approach to pain management. The remainder of the book addresses clinical pain problems frequently encountered in pain clinics.

An approach to therapy is provided, but little is stated about the efficacy of different treatment strategies and outcome analysis is absent. The chapter on neurogenic pain is the most comprehensive. The final chapter provides protocols for pain management, which are useful

summaries for the clinical management of pain patients. Although this book gives a good overall review of chronic pain management, I cannot recommend it for the targeted readers.

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Noninvasive Approaches to Pain Management in the Terminally Ill

Dennis C. Turk, Caryn S. Feldman (Eds.). The Haworth Press Inc, New York, 1992. 223 pp. ISBN 1-56024-300-7 \$44.95 (us)

This is a comprehensive multiauthored book consisting of nine separate chapters. The editors have maintained a depth, quality and uniform style throughout the chapters. In the preface, the editors clearly define the role of noninvasive approaches to pain management in the terminally ill and stress the necessity for a multidisciplinary approach to patient care. Clinicians who read this book will gain insight into aspects of patient care that are frequently glossed over in our quest to control symptomatology, utilizing current invasive or pharmacological interventions.

Each chapter is initially summarized then provides a clear description of the rationale for applying the different techniques suggested, as well as practical tips. A succinct approach to the assessment of pain in terminally ill patients is given, with emphasis on the impact of psychological variables affecting the patients and their families. The therapeutic modalities examined encompass hypnosis, relaxation, therapeutic touch and massage as well as coping skills training. This book is not a textbook, but is one of the most complete, well referenced and readable books on the subjects. The book should have wide appeal to all caregivers involved with the terminally ill and can function as a quick practical guide as well as a valuable reference source.

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