

# BOOK REVIEWS

John M. Porter, MD, Book Review Section Editor

## **Carotid endarterectomy: a practical guide**

N. L. Browse, A. O. Mansfield, C. C. R. Bishop;  
Oxford; 1997; Butterworth-Heinemann; 126 pages;  
\$110.00.

This mostly English-authored book concerns the indications for, the performance of, and the controversies concerning carotid endarterectomy. It begins with a touching foreword by Felix Eastcott. After a review of the cellular and subcellular pathology of carotid atherosclerosis, Dr D. J. Thomas writes a well-written guide to the clinical evaluation of patients. The average American medical student and resident who is test oriented would well benefit from reading this chapter. The chapter on noninvasive evaluation, written by our colleagues at Utrecht, spends most of its verbiage on transcranial Doppler ultrasound scan, a testing method that most American surgeons view with feigned interest. Whereas the ultrasound scan illustrations are excellent and serve to complement the prose, I found it difficult to identify all of the abnormalities in the reproductions in the radiology review. Americans will note with interest that this delightfully written chapter states that 90% of patients may be satisfactorily evaluated with intravenous digital subtraction angiography.

The piece de resistance is the chapter by two of the editors regarding the technical performance of the operation. This side-to-side comparison of techniques was most educational and enjoyable to read, but the chapter was also disappointing because of a total absence of results from each of these authors. Most surgeons acknowledge that equivalent results may be obtained with a variety of techniques. It would have been nice to have this substantiated.

This treatise covers most of the controversies concerning carotid surgery, and, whereas many references are at least 10 years old, the arguments are, by and large, up to date. The same topics may be covered in different chapters (preoperative cardiac workup, patching, indications for operation), and the different discussions tend to complement each other. This book will be important reading for the novice surgeon who is becoming interested in carotid endarterectomy, but, for those seeking a complete and encyclopedic review, the book will serve only as a good introduction. The reader will be pleased by the English wit, the personal touch evident in many chapters, and the ease of comprehension.

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## **Cell biology: a laboratory handbook, 2nd ed**

Julio Celis; San Diego; 1998; Academic Press;  
\$149.95.

*Cell biology*, edited by Julio E. Celis, is a four-volume laboratory handbook that describes methodologic aspects of cell biology. Volume 1 deals with cell and tissue culture, including viruses, mammalian cells, fungi, and protozoa. Volume 2 is devoted to organelles and cellular structures and includes preparation of specific organelles, assays of cellular biologic processes, and the production, characterization, and use of antibodies. Volume 3 describes microscopy (light, electron, and confocal), measurement of intracellular calcium, *in situ* hybridization, and production of transgenic and gene knockouts. Volume 4 includes transfer of macromolecules, expression systems, differential gene expression, and proteins and protein analysis. The overall approach to cell biology techniques is comprehensive.

The handbook contains sufficient detail for a novice investigator to establish new techniques and for the experienced investigator to expand their technical abilities. In light of rapidly emerging techniques in cell biology, the handbook is particularly useful to remain updated in how to enhance laboratory methodology. The format is "reader friendly" and is well illustrated, with both color and black-and-white figures. The chapters are referenced with a limited number of useful citations. The panel of authors is distinguished and well recognized in their respective fields.

The handbook also contains interesting appendices, including discussions on the evolution of cell culture, the use of the Internet as a cell biology tool, and radiation safety. Volume 4 contains a useful list of suppliers whose products were used in the protocols described in the handbook. Finally, there is an extensive subject index.

We specifically used the handbook to implement new techniques in our laboratory. In summary, on the basis of review and personal use of the information contained in the handbook, this is an essential resource for any laboratory that performs cellular biology.

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## **Evidence-based healthcare: how to make health policy and management decisions**

J. A. Muir Gray; New York City; 1997; Churchill-Livingstone; 288 pages; \$29.95.

Mark Twain defined human beings as creatures made at the end of the week when God was tired. More recently, Herbert Simon, the Nobel laureate, provided ample scientific evidence that human organizations do not work for or toward perfection as a matter of course but rather work

simply to achieve sufficient levels of satisfaction. The author of this book calls us to base decisions and thereby our standard for satisfaction increasingly on the strength of sound evidence so that we will generate greater health and happiness for individuals and populations.

Gray seeks to up the ante and definitively put the health care industry on the road of rational optimization. For him, there is less satisfaction to be found in opinion-based decisions than in having the right facts at hand. However one may feel about this assertion and the "evidence-based medicine movement," this book contains sufficient wisdom to purchase for repeated reading. Pound for pound, it is a good buy. The distinct strengths of this work include its clarity of expression and the many threads of humor and wisdom. In addition, I found the book's outline format to be especially useful for quick reference, although some readers may find the format distracting.

The author is the Director of Research and Development of Britain's National Health Service, Anglia and Oxford Region. In dedicating the book, he admits to the benefits of optimism and irony. This is fitting inasmuch as his aim is to help decision makers carefully appraise evidence in reaching decisions relating to the health care of *both* individual patients and populations. He is right to make such a complex call, but delivering on the aspiration is not a task for the meek. Unfortunately, some of the prescriptions are complex to the point of being confusing.

The book goes beyond the "evidence-based medicine movement" for clinical decision making and seeks to integrate it as the basic approach for running all health care systems and organizations. To accomplish such an objective, the author lays out a number of thoughtful sets of considerations, such as how one does the right things right. He sketches out the dimensions of health services, reviews issues of screening and testing, summarizes the various forms of research evidence, and delineates issues relating to outcomes of systems. This last item is given substantial attention so that one can appreciate the dimensions of outcomes, equity, safety, effectiveness, and patient satisfaction. He seeks to illustrate evidence-based purchasing and policy making and the nature of the skills needed to manage evidence. He ties these health system management perspectives to the clinical realm and illustrates the growing sources of relevant information on which such a health care system can draw for support (see the website for an Evidence-Based Healthcare Toolbox, <http://www.his.ox.ac.uk/ebh.html>).

This book is a superb choice for house-staff education and for any surgeon who has not reflected much on organizations or health systems management or who has been unaware of developments in evidence-based medicine. In general, this movement has attracted far too few surgeons. To complete the picture, some companion references relating to emerging information technology are needed. The author is curiously silent on the absolutely crucial role computer-based health records must play if such a robust data-driven care system is ever to be truly manifest. Few innovations could take him further than "just-in-time knowledge" servers to assure process management.

Vascular surgeons are among the vanguard of surgeons moving toward more precise performance measurement and reporting. This book will be useful to those who wish a quick, efficient introduction to the complex but important world of greater accountability to which we are clearly headed. Whether we will become a new and better species of professional is not yet clear. But books like this make it abundantly clear that we cannot continue to dismiss our ignorance on ways to improve our work.

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#### Atlas of cardiovascular monitoring

Jonathan B. Mark; New York City; 1998; Churchill Livingstone; 377 pages; \$75.00.

The use of cardiovascular monitoring in patients who are critically ill has recently been under intense scrutiny. In a recent, prospective, observational multicenter study of patients who were critically ill and monitored with right heart artery catheters, for example, improvements in outcome could not be shown in spite of increased use of hospital resources.<sup>1</sup> Another study showed that physicians frequently have major deficits in the knowledge base required to understand the information obtained from advanced hemodynamic monitoring.<sup>2</sup> Armed with this information, the use of advanced cardiovascular monitoring is being challenged and is decreasing in many institutions. Nevertheless, there is some support from the literature that subsets of patients, unlikely to be identified in large studies with diverse patient types, may benefit from cardiovascular monitoring. This opinion has been reflected in a detailed referenced consensus statement of the Society of Critical Care Medicine.<sup>3</sup> Because of continued impetus to use advanced cardiovascular monitoring in smaller numbers of patients in the face of decreasing relevant experience and knowledge base, a textbook showing and explaining both routine and advanced hemodynamic and electrocardiographic patterns is a necessity for practicing health care personnel.

The text *Atlas of cardiovascular monitoring*, by Jonathan B. Mark, consists of a collection of pressure traces, electrocardiogram strips, and physiologic diagrams that are appropriate for use by specialists and nonspecialists involved in the care of patients with advanced cardiovascular monitoring. One might question the use of the term *atlas* in the title because the content goes beyond the scope of a "bound volume of tables, charts, or maps illustrating a particular subject."<sup>4</sup> Accordingly, in addition to providing a wealth of figures and diagrams, the text provides guidance in the interpretation of these physiologic signals. For example, a discussion of the effects of a fluid challenge went beyond simple illustrations of changes in intracardiac pressures by including a clearly written explanation and figures of the compliance characteristics of the

