

## Book Reviews

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### **A Simplified Approach to Electrocardiography**, by Richard Johnson and Mark H. Swartz (Saunders).

The idea behind this text is good. There probably is a need for an introductory monograph on electrocardiography that the beginning student could use to develop pattern-recognition skills that would serve as a basis for more detailed study. The book does have several excellent features. The clear and concise diagrams illustrate the ideas that they are intended to convey. Also, the use of fully reproduced, full-sized electrocardiograms with a supporting test on the page immediately following eliminates the need to review with a magnifying glass and frequent paging forward and backward to read the text and then look at the example. For the most part, the introductory section on fundamental concepts is good, but is often superficial. Occasionally, the writing drifts off on a parallel course, as in chapter nine where a three-paragraph digression on sick sinus syndrome crops up in the middle of a discussion on supraventricular conduction defects.

There are two difficulties with the text. One is the "certainty" with which criterion for different conditions and findings is given. The fact that electrocardiography is a clinical science which is inexact and subject to debate (chamber enlargement for example) is not conveyed. It is this quality of electrocardiography that makes the subject difficult for students in the first place and they need to at least realize that this is often not a black-and-white discipline. Probably a more important item is the selection of EKGs for the practical section of the book. Electrocardiograms for the student, which are used to introduce concepts and serve as examples, ought to be the grossest and most unequivocal that can be found. Most of the tracings selected are good, but several show a degree of abnormality which is borderline or in which other equally reasonable diagnoses might be entertained which could add to a student's future confusion.

Overall, the text does a good job at what it sets out to do—giving introduction to a logical approach to the electrocardiogram. It gives a written form to much of the bedside teaching that goes on with medical students once they enter into the hospital and begin to become clinically involved with patients and, as

such, could serve to keep the student a little more organized in his or her learning. The price is reasonable, and that plus its clear content makes it a worthwhile investment for students in their early clinical years.

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### **Coronary Artery Spasm: Pathophysiology, Diagnosis, and Treatment**, ed by C. Richard Conti (Dekker).

This is an excellent review of an uncommon condition, directed at cardiologists and those interested in coronary pathophysiology. The editor has intended this to be a reference for future work on coronary artery spasm, and the breadth and detail of the text will ensure this.

Prevalence of coronary artery spasm is discussed in the first chapter, but the text avoids any hard facts, as presumably, none are available. Predictably, Sir William Osler is mentioned, but several other earlier and later references to spasm make interesting reading. The pathophysiology of spasm is well expounded by the Gainesville group, which has a long and proven track record on this subject. Detailed contributions on the pathology of coronary arteries in which spasm was documented from Roberts and the NIH are recorded, based on the findings in 3 patients.

A notable contribution from the Cleveland Clinic provides excellent data on the angiographic findings in this condition. Acting on a recommendation of Dr. William Proudfit, this group was the first to administer the ergonovine test in the angiographic diagnosis of coronary artery spasm in December 1972. The present status of this now well-accepted test is described by Bertrand from Lille, France. There are three chapters which discuss other less-sensitive provocative tests, including one on the application of exercise testing from the Montreal Heart Institute. These form a useful reservoir of information on coronary physiology, quite apart from their application to coronary vasospasm.

The role of spasm in angina pectoris is discussed by the editor, who makes the balanced point that it is not a factor in the vast majority of patients with repro-

ducible angina of effort. Sheehan from the Seattle group has contributed an excellent chapter on occlusion and reperfusion of the coronary artery bed, but makes the point that occluding thrombus and not spasm is the problem in most clinical situations.

Finally, the last seven chapters are devoted to an extensive review of the treatment of coronary artery spasm, with a sensible discussion on the rare need for bypass surgery by the editor. This book is clinically oriented and will serve as a useful source, both for the researcher in this subject and the general cardiologist.

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**Reoperative Surgery of the Abdomen**, ed by Donald E. Fry (Dekker).

Reoperative surgery is a difficult subject. It is difficult sometimes for the surgeon to admit emotionally and intellectually that a patient must be returned to the operating room, and it is frequently difficult technically to do so. This text is one of the few contributions to this area. Another similar book previously published which should be consulted is *Reoperative Gastrointestinal Surgery* by Drs. Thomas T. White and R. Cameron Harrison.

The topics are principally abdominal-gastrointestinal in nature with chapters on vascular surgery, transplant surgery, endoscopy, and urology. The primary thrust of the book is its gastrointestinal content.

Not all of the text contains advice in reoperative surgery. A considerable portion of the book can be considered to deal with primary surgical topics and not necessarily reoperations. The quality of the chapters was variable; some of the chapters were excellent, others were too basic, or were long and not well organized. The chapters on surgery for recurrent peptic ulcer disease and reoperation for postgastrectomy syndromes were concise and informative. Some duplication of material among chapters was found.

The surgeon with a gastrointestinal interest would most likely benefit from this text. I do not feel that enough material exists to make it a worthwhile purchase for the vascular, transplant, endoscopic, or urologic surgeon. The difficulty in assembling a textbook of this nature is recognized. Reoperative surgery is one of the humbling and frustrating parts of medicine.

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**Patient-Controlled Analgesia**, by M. Harmer, M. Rosen, and M. D. Vickers (Blackwell)

Relief from postoperative pain can be successful but seldom is, and the drugs are not to blame. Fixed doses

of analgesic are ordered, nurses may reduce these, and patients vary. The routine has prevailed for decades since it is simple, economical, undemanding, and safe—because the doses are so often ineffective. Patients undoubtedly would be better off now if the effort to develop new analgesic drugs had included improving the method of administration. This publication, under the auspices of the European Academy of Anaesthesiology, provides some incentive for change.

Among the 25 participants are two from the U.S.A. and eight representing manufacturers of equipment; the foreword is by E. M. Papper, former Dean of the University of Miami and also prominent in the annals of American anesthesiology. The title is self explanatory: the doctor prescribes, the nurse prepares, but the patient controls (with a simple push button) increments of opiate according to need. Although the intravenous route has received most attention, the technique is being applied epidurally and intramuscularly; sublingual buprenorphine and sustained-release oral morphine are also mentioned here.

There are three main sections, the first concerned with terminology, with the pharmacokinetics of opiate administration, with patient characteristics which influence pain relief, and with the design of clinical trials. Jargon definitions are few—"lock-out time," which is the minimum period between patient-controlled doses, and the familiar "bolus," applied here to increment or infusion (solid matter made liquid by common medical usage!). Doubt is expressed about applying pharmacological data to patients who are in pain and in complex states of postoperative recovery; age (rather than body weight or sex) has the greater influence on opiate requirement; and doses with PCA are no lower than by conventional methods (for example, 30 mg morphine per day).

The second section deals with equipment and its design. "Nonlinear" demand interferes with mathematical models for PCA, and so does the wide variation between patients. Another snag to greater machine control is the poor relation between analgesia and plasma concentration of drug. Among design options, compactly summarized in a table, the most variable is the facility for infusion, continuous or intermittent, patient regulated or not, sometimes using microprocessors to calculate future dose from past requirement. The main features of eight machines are listed on a two-page spread (only two U.S. suppliers being named at the time of publication).

Most of the clinical information is in the third section, beginning with an impressive review, from Upsalla, of the performance record of the first 15 years of PCA (yes, it is so long in a few centers). Respiratory depression, the threat lurking in all discussions of PCA, is considered specifically, for it may fluctuate according to pain and conscious level. Precautions are emphasized: to limit bolus size, to protect against air embolus and accidental overdose, to use special intravenous cannulas. For reassurance, one contributor refers to 4,000 administrations of PCA