BOOK REVIEWS

Edward Lowenstein, M.D., Editor

Perioperative Cardiac Dysrhythmias. By JOHN L. ATLIE. Ill. Chi-

At last we have a comprehensive, authoritative review of the field
of cardiac dysrhythmia written by an anesthesiologist for anesthesi-
ologists. Although much of the material has been provided in cardiology
texts, Dr. Aitlee's book clearly describes the pathophysiology, diagnosis,
and management of the clinically important dysrhythmias. More im-
portantly, a timely discussion of the effects of anesthetic agents and
ancillary drugs on perioperative dysrhythmia is presented, filling a
conspicuous gap in the literature.

The text begins with a historical perspective on the incidence of
perioperative dysrhythmia. Normal cardiac electrophysiology is re-
viewed, followed by a detailed discussion of electrophysiologic mech-
anism thought to be responsible for dysrhythmia. Basic electrocar-
diography is then presented as well as a potpourri of cardiographic
abnormalities seen with various drugs and pathologic states.

The "meat" of the book is an up-to-date, encyclopedic review of
proarrhythmic and ant Arrhythmia actions of the anesthetics and other
drugs used by the anesthesiologist. Volatile anesthetic "sensitization"
to epinephrine arrhythmias is discussed, as are the effects of elec-
rolyte abnormalities, hypercarbia, and hypoxemia. The material cannot
easily be found elsewhere.

Recognition and management of specific dysrhythmias is then pre-
sented in a clear, crisp fashion. Particularly noteworthy is the discus-
sion of pacemakers and direct current cardioversion.

Perioperative Cardiac Dysrhythmias has shortcomings. Noticeably
missing is a discussion on implantable defibrillators and surgical therapy
for severe dysrhythmia. More importantly, anesthetic management of
patients with such poorly controlled dysrhythmia is not mentioned.

As a single-authored text, the style is uniformly readable and un-
cluttered by repetition. Bibliographic citations are abundant and cur-
rent. Finally, the figures are adequate but not stellar.

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New Concepts in Cardiac Imaging—1985. Edited by G. M. POHOST,
C. B. HIGGINS, J. MORGANROTH, J. L. RITCHIE, AND H. R. SCHEL-
$49.95.

Research in cardiovascular imaging is advancing rapidly in many
areas such as noninvasive assessment of ventricular function, quanti-
fication of infarcted or ischemic myocardium, and increase in the sen-
sitivity and specificity of the early diagnosis of ischemic heart disease.
However, the wide variety of technologies being employed in this area
makes critical evaluations of these techniques difficult. To this end,
New Concepts in Cardiac Imaging represents the first volume of an annual
series to be devoted to critical reviews of cardiac-imaging techniques.

In this book, Dr. Pohost, his fellow editors, and an additional 27
contributors have collected 12 succinct reviews of current ultrasound,
radiouclide, x-ray, and magnetic resonance techniques. Included are
discussions of progress in the diagnosis of valvular lesions by conven-
tional and Doppler echocardiography and experimental work on the
echocardiographic diagnosis of myocardial ischemia and infarction.
The use of single-photon emission computed tomography and positron
emission computed tomography to measure regional myocardial per-
fusion and substrate metabolism is reviewed in a section on radionuclear
techniques. Subsequent sections discuss the role of digital subtraction
angiography, cardiac computerized tomography, and magnetic reso-
nance in assessing ventricular function and detecting coronary artery
disease.

Each review is expertly written, illustrated, and referenced. Clinical
investigations are emphasized strongly, but laboratory studies are dis-
cussed in detail when data in humans are controversial or lacking.
Only literature published prior to 1984 is discussed, however, and this
lag is especially noticeable during discussions of rapidly advancing areas
such as magnetic resonance. Also, anesthesiologist will be disappointed
that esophagal echocardiography is not reviewed. Future volumes
should help to fill these gaps.

This book is a valuable introduction to the use of new imaging tech-
niques in the diagnosis of cardiovascular diseases. It will be of interest
to anesthesiologists because many medical centers are already beginning
to use these techniques to evaluate their patients' cardiovascular status.

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Decision Making in Critical Care. By HILLARY DON, M.D. St. Louis,

This well-constructed text resembles an organized and complete set
of personal study notes. Hillary Don, M.D., has presented the most
common critical-care problems by organ system. Each problem is ap-
proached with a decision-tree algorithm format on one page accom-
panied by another single page of background information, explanation,
and references. The algorithms are clear, concise, and unexpectedly
comprehensive. They represent a valuable tool for teaching medical
students and residents to think in an orderly fashion. This format lends
itself to incorporation in computer data base and logic systems. It is
especially appropriate in this era of cost containment and cost-benefit
analysis.

This text is well referenced, indexed, and organized. It will be a
valuable addition to any medical library, and an excellent reference
volume for a personal library.

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The Surgical Neonate: Evaluation and Care. By Howard C. FILSTON
AND ROBERT J. IBANT, JR. East Norwalk, CT, Appleton-Century-

The clinical care of newborn infants undergoing surgery has received
increasing attention in recent years, particularly due to the improved
survival rate of neonates with complex congenital malformations and
also due to the large number of surviving preterm neonates who may
require surgery for necrotizing enterocolitis, patent ductus arteriosus,
or inguinal hernia. Because these recent advances may be attributed
to the work of pediatric/anesthetists, anesthesiologists, pediatric
surgeons, obstetricians, and nursing personnel, the care of the surgical
neonate in different centers may be entrusted to all or any combination
of these disciplines. In some situations, there may be considerable dis-
agreement among the experts of these different fields, depending on
their different approaches to particular problems.

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