

cludes individual ownership, but each department should have a copy.

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**Medical Emergencies, Diagnosis and Management.** By R. ROBINSON AND R. STOTT. Second edition. Philadelphia, J. B. Lippincott, 1977. Pages: 193. Price: \$9.50.

This book has been written with the object of giving the newly qualified physician working in the emergency room a concise approach to the diagnosis and management of medical emergencies in the various organ systems. There are thus the usual chapters on cardiovascular and respiratory emergencies as well as chapters on endocrine and psychiatric emergencies. There are also chapters on drug overdosage, hypothermia and, perhaps most usefully, a chapter on general clinical problems, where specific problems such as the hypotensive patient, severe chest pain, and other general clinical situations are presented with their differential diagnoses and cross references for management.

Although the scope is wide, the content is understandably sketchy in a book of this length. Generally, there is a brief discussion of the diagnosis, listing just the major diagnostic features, followed by a section on the management numerically listing the salient points. The book has a bibliographic section of suggested further reading, and this is referred to frequently in the text. Thus, for many details, an alternate text has to be consulted. In addition, frequent cross reference is made to other parts of the text. It can be appreciated that this is done in the interest of conciseness but it is, nevertheless, a frustrating distraction and time waster.

More specifically, the chapters on cardiovascular and respiratory emergencies are adequate; one would perhaps take exception to some of the indications for mechanical ventilation detailed here. The chapters on renal emergencies and overdoses are good in what they cover; however, it is surprising that there is not a section on poisonings in general and their management. The section on endocrine problems is useful, with attention being given to the various types of coma associated with diabetes, as well as a brief discussion on some of the less commonly encountered endocrine emergencies, such as hypo- and hyperparathyroidism, Addisonian crisis, etc. Other less commonly seen emergencies that are discussed include the crisis of myasthenia gravis and hypothermia; in the latter, treatment is not dealt with at all effectively, and one is left using a trial-and-error approach.

An interesting aspect of the medical education system is that frequently the most acutely ill patients received in the emergency room are initially seen by junior personnel with little of the diagnostic experience their more senior colleagues might have. This book has been offered as a means of filling in that lack of experience. However, it could best be used as a rapid reference to exclude major entities or as a source for reviewing the salient points of treatment once a diagnosis is made. One would certainly expect any newly qualified physician entering the emergency room to have a more detailed knowledge than is presented here of most of the topics discussed. This book could perhaps best be used by medical students entering their clinical training, as a preview to the management of medical emergencies.

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**Applied Physiology of Respiratory Care.** By J. HEDLEY-WHYTE, G. E. BURGESS, T. W. FEELEY AND M. G. MILLER. Boston, Little, Brown & Co., 1976. Pages: 552. Price: \$22.50.

This textbook is directed to "physicians and other hospital personnel who care for critically ill patients" and is presented as a "source of information of board examination candidates in the medical and surgical specialties, including respiratory therapy." The book is well-organized, well-written and includes an extensive bibliography. The first 11 chapters are concerned with the general management of respiratory failure, and the remaining 20 chapters present respiratory management of specific conditions such as organ failure, trauma, and drowning.

It may well be that the objectives are too broad to be attainable, for the authors fail to achieve their stated purposes, primarily because of inadequate physiologic and pathophysiologic detail. For example, they state that intermittent positive-pressure breathing "rarely causes hypotension" since it is compensated for by an increase in peripheral vascular resistance. This is largely true for patients who can increase their vascular resistance, but no mention is made of those patients who have limited or no ability to compensate, *i.e.*, the high cervical cord transection, the anesthetized patient, or the patient receiving peripheral dilating agents who may require mechanical ventilation, frequently continuous positive-pressure breathing. Normovolemic hypotension during continuous positive-pressure breathing is a complex clinical problem, and the authors meet it by stating that since volume expansion can be hazardous they "prefer to use dopamine to manage hypotension in normovolemic patients on CPPV," an obviously interesting approach made even more so by the absence of qualifying remarks, discussion, or bibliography.

When preparing for board examinations, the candidate is researching and reviewing the "why" and "how" of his particular specialty. This text does not provide in-depth, complete answers to these questions. For example, "Since total respiratory compliance is simple to measure in patients receiving controlled ventilation, it should be monitored during the application of positive end-expiratory pressure to determine the optimal level of cardiopulmonary function during CPPV." A short discussion of *how* it is measured and its correlation with optimal cardiopulmonary function would appear to be in order. Similarly, a statement such as "increases in inspiratory flow rate above 25 liters per minute produce a marked increase in deadspace-to-tidal volume ratio, which can lead to alveolar hypoventilation if no changes in the rate or tidal volume of the ventilator are made" requires further explanation to insure the reader's understanding.

The authors feel that since personal experience is highly important, bias is unavoidable. This attitude tends to mislead the board candidate when opposing viewpoints are not presented. For instance, a declaration that in the anesthetized patient "the degree of atelectasis that occurs can be minimized by ventilation with large tidal volumes" ignores the controversy over this concept, and no remarks qualify the influence of ventilatory pattern on shunting or atelectasis.

An interesting concept that positive end-expiratory pressure reduces alveolar macrophage function, thereby increasing the risk of pulmonary infection, is presented without elaboration or literature reference.

Nitroprusside is said to be of benefit in patients in endotoxic shock. The statement is documented, but greater detail would better serve the board candidate and the clinician. Space limitation is an important consideration, but several long case reports do appear throughout the text, perhaps at the expense of more valuable detail.

In the section, "Respiratory Consequences of Specific Surgical Problems," it is stated that no tachyphylaxis develops in response to sodium nitroprusside. This is erroneous. Sensitive patients

require more drug per minute as infusion is continued, and resistant patients require increasing doses to maintain reduced blood pressure. Tachyphylaxis is not the problem that it is with trimethaphan, but it does occur. Since critically ill patients may receive long-term sodium nitroprusside therapy, thiocyanate and cyanide toxicity should be distinguished in regard to clinical manifestation, detection and treatment.

The sections dealing with respiratory management of specific conditions secondary to or following post-cardiopulmonary bypass, obesity, increased intracranial pressure, and extracorporeal membrane oxygenation for respiratory failure are good; however, there is no mention of Reye's syndrome and its management.

There are a few minor printing errors, and in the copy I re-

ceived many pages among the first 50 were lightly printed, and therefore annoyingly difficult to read.

Two thousand one hundred and fifty-four references are cited alphabetically by author at the end of the book. I found myself leafing through these 104 pages of references too often and with increasing impatience. Post-chapter bibliography is less cumbersome for the reader, but would, of course, have necessitated some repetition. The bibliography is nonetheless the best feature of this book.

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