

## Core Topics in Critical Care Medicine.

Fang Gao Smith, Joyce Yeung, editors. New York: Cambridge University Press. 2010. Hard cover, 408 pages, illustrated, \$99.

There is a growing demand for critical care services as the population ages and the average severity of illness of hospitalized patients increases. Despite a movement toward intensivist-managed care of intensive care unit (ICU) patients, such as the Leapfrog Group initiative, the majority of ICU patients continue to be primarily cared for by physicians without subspecialty training in critical care. There is, therefore, an important need to train more intensivists, and for non-intensivist physicians, including internists, surgeons, and anesthesiologists, to be competent and comfortable in providing critical care. As one hallmark of critical care medicine is its interdisciplinary approach, it is equally important for ICU nurses, respiratory therapists, physical therapists, and pharmacists to have a solid understanding of clinical issues in critical care medicine.

**Core Topics in Critical Care Medicine** states that it is primarily aimed at trainees from all specialties who are undertaking subspecialty training in critical care medicine. It aims to provide “comprehensive, concise, and easily accessible information on all aspects of critical care medicine,” with an emphasis on up-to-date evidence-based medicine. The book has 2 editors and 34 authors, all based in the United Kingdom. The book is divided into 4 sections. Section I, entitled “Specific Features of Critical Care Medicine,” covers administrative issues in the ICU, such as criteria for admission, discharge, and transfer, and systems issues, such as outcomes monitoring and information management, as well as general patient-care related topics such as nutrition, pain control, sedation, and ethics. This first section would be particularly useful to non-physician healthcare providers, such as paramedics, respiratory therapists, nurses, nurse managers, and administrative staff. Section II, “Systemic Disorders and Management,” discusses disorders that are not easily classified into a single organ system, such as sepsis, multiple-organ failure, fluid and electrolyte disorders, and acid-base ab-

normalities. Section III, “Organ Dysfunction and Management,” has 24 chapters, each dedicated to a specific diagnosis, organ failure, or special patient population. Section IV consists of information on United Kingdom/European postgraduate examinations in intensive care medicine and sample test questions and answers (30 multiple-choice and 15 viva [oral] questions). The book is replete with useful and visually pleasing color illustrations, which include algorithms, graphs, charts, electrocardiogram tracings, and radiographs.

This textbook’s excellent organization and thorough, relevant list of topics are real strengths. In addition to the expected (and necessary) chapters on common ICU diagnoses and organ failures (including truly outstanding sections on noninvasive ventilation and unconventional strategies for respiratory support), the editors included chapters on equally important but sometimes forgotten systems-related topics. These include early recognition of critical illness, and triage of ward patients by medical emergency teams (in the United States commonly referred to as rapid-response teams); criteria to safely and efficiently admit, transfer, and discharge patients from the ICU (an increasingly common and difficult problem as demand for critical care services increases out of proportion to the availability of resources); and methods and limitations of quality and performance assessment for ICUs. I also particularly appreciated the sections on two special patient populations that make many clinicians uncomfortable: obstetric and pediatric. Each chapter in the book concludes with a summary of key points and resources for further reading, which greatly facilitate study and review by learners.

As a United States physician, I think the differences between American and British medicine warrant a moment to consider the value and relevance of this textbook for a non-United Kingdom audience. It is important to note, first of all, that there are real differences. Some of these are only skin-deep, for example the spelling of *haemoglobin*, *dieresis*, or *frusemide*. There are some minor issues of terminology, such as ITU (intensive therapy unit) instead of ICU; suxamethonium instead of succinylcholine; partial pressures of gases measured in kPa

instead of mm Hg. Medical education is organized differently: a consultant is equivalent to an attending physician; a registrar is the equivalent of a senior resident or fellow. The structure of the healthcare system is specific to each country and affects clinical resource utilization.

More importantly for a medical trainee, there are differences in patient care, many of which are based on availability (or lack thereof) of certain medications or formulations. For example, enoximone is not approved by the United States Food and Drug Administration, and intravenous formulations of omeprazole and acetaminophen are used in the United Kingdom but are not available in the United States. It is likely that a more senior reader would find these differences interesting, and would enjoy learning about how medicine is practiced in other areas of the world. For a more junior trainee, however, the disparities could lead to confusion. Overall, the differences are few enough and insignificant enough that this book remains an excellent learning tool for an American audience. I would suggest that in future editions, in consideration of an international audience, the authors could refer to values in both the metric and the United States customary units.

Another major strength is the book’s conversational, easy to read, and yet professional tone. The chapters are only 5–10 pages long. This economy of words removes the “intimidation factor” that longer, denser, and more comprehensive texts may have. The reader has a comforting impression of a trusted clinical mentor telling them what they need to know. The drawback to this is that the book occasionally glosses over the nuances of controversial issues, making it seem that there is clear consensus when there is not. An example of this is in Chapter 21, “Post-operative Critical Care,” where the author states that “in patients with ischemic heart disease, haemoglobin concentration should be maintained above 10 g/dL.” Although many experts would agree with that statement, there are others who would not; this is an issue on which there is conflicting data, and further research is being conducted.

There is room for improvement in future editions, including some “low-hanging fruit,” such as typographical errors, thoroughness of the index, and the sample questions in Section IV. The book has a few scattered errors, most of which are typographical and do not affect the content or ease of reading, but a couple of which do. For example, Chapter 29, “Failure of Oxygenation,” states that D-dimers “have a low sensitivity for diagnosing pulmonary embolism, as they can be raised by many different causes;” I presume they meant to write “specificity” instead of “sensitivity.” The index is, as far as I can tell, accurate, but far from complete. There are at least several topics that are discussed in the text but are nowhere to be found in the index, such as corticosteroids, subdural hematoma, and transfusions.

The questions given in Section IV could be a valuable study tool, but some of the multiple-choice questions are ambiguous or perhaps have incorrect answers. For example, the answer given to question 18 indicates that secondary causes of cardiomyopathy include dystrophia myotonic, porphyria, and thyrotoxicosis, but not alcoholism, which is a well described cause of dilated cardiomyopathy. Care should be given to selecting unambiguous questions, and then providing not only answers, but also explanations with appropriate references.

In summary, this textbook tackles a difficult task of presenting a huge amount of complex information in a clear, concise, and easily accessible fashion. For the appropriate reader, I think it makes an excellent resource. I disagree somewhat with the editors on who is the most appropriate reader for this book. In my opinion, it is not detailed or comprehensive enough for the trainee in critical care medicine, who is expected to become an expert in the field. It could be, however, a very valuable resource to either the many non-intensivist physicians or nurses who spend a portion of their time caring for critically ill patients, or for junior trainees in internal medicine or surgery, who may develop an interest in critical care medicine and pursue subspecialty training in the future.

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The author has disclosed no conflicts of interest.

**ABC of Asthma**, 6th edition. John Rees, Dipak Kanabar, Shriti Pattani. Chichester, West Sussex, United Kingdom: BMJ Books/Wiley-Blackwell. 2010. Soft cover, illustrated, 104 pages, \$36.95.

Asthma is a common disease affecting millions of children and adults worldwide and it is the most common chronic disease of children. The pathophysiology of asthma is complex, and there is an important interplay of genetics and environment causing a variety of manifestations. There are many national and international guidelines for the stepwise approaches to therapy and education for both maintenance care and acute episodes of asthma. **ABC of Asthma** is in the ABC book series by BMJ books and is updated in this 6th edition. It is divided into 17 concise chapters that cover all pertinent aspects of asthma, including pathology, prevalence, diagnostic testing, monitoring, clinical course, precipitating factors, and treatment guidelines for both chronic and acute management in both adults and children. The first 10 chapters discuss management in adults, followed by 5 chapters that discuss management issues in children. The last 2 chapters recap the clinical aspects of asthma care in a primary care setting and the organization of an asthma clinic. A short index follows, which is useful.

The stepwise approach and guidelines are based on those of the British Thoracic Society, the Scottish Intercollegiate Guidelines Network, and the Global Initiative for Asthma (GINA) guidelines for asthma therapy, which differs somewhat from the guidelines outlined in the United States. For instance, during asthma exacerbation treatment, very specific oxygen suggestions are given (40–60% oxygen delivery for all patients) in addition to intravenous aminophylline and intravenous  $\beta$ -agonists as adjuncts in severe attacks, which are not recommended in the Expert Panel Report from the United States National Asthma Education and Prevention Program because of insufficient evidence of benefit. In addition, there are some spelling and wording differences between the United Kingdom and United States guidelines. In general, the authors achieved their stated aims, selected and organized the material in a logical fashion, and supported the material with appropriate current references.

This soft-cover, lightweight book is easy to read and would be useful to respiratory therapists, nurses, medical stu-

dents, and allied health professionals. It would also be useful to primary care clinicians as a thorough overview of asthma, with pertinent aspects for care. It is well written and would take about 3 hours to read in depth. Each chapter begins with a bulleted boxed overview of the key points to convey, which organizes the reader's thoughts. There are simple diagrams and figures that accurately illustrate the data of each chapter. Key sections are expanded in boxes, which include lists of symptoms, descriptions of specific tests, and causes of occupational asthma. There are also a few tables. The layout is helpful to readers, as it breaks down the chapters to make it easier to read, and each chapter is only a few pages (7 at most).

Though asthma is similar in adults and children, there are 5 dedicated chapters on the differences in children, which will be helpful to those unfamiliar with specific pharmacotherapy and differences in younger patients with asthma. The chapters all end with a further-reading section, and some in addition have a reference section with current literature cited within that chapter. Several topics are covered in multiple chapters, and this reinforces the message being conveyed. The book is well referenced with current literature to support its statements. Compared to other books on the basics of asthma, this book is reader-friendly and comparable to other works in the realm and is reasonably priced.

My only criticism relates to some of the color photographs, which are really unnecessary. For instance, all readers would know what a teenager is, or an obese child, or what vacuuming is, yet there are figures with color photographs for “asthma diagnosed in a teenager,” “childhood obesity is linked to asthma,” and a man vacuuming a chair, which don't add anything to the context of the book as they are obvious, but they do add color. Perhaps more data on obesity and asthma, and specific precipitating allergens would make the text more useful. On the other hand, some of the photographs are very important, including those of patients demonstrating inhaler technique and nebulizer technique, spacer devices, and examples of thrush. One diagram I would like to see added is a specific step-by-step outline of the appropriate way to instruct a patient in inhaler technique, though this is briefly relayed in the text. It might be help-