Reviews of Books and Other Media. Note to publishers: Send review copies of books, software, and other media to RESPIRATORY CARE, 9425 North MacArthur Blvd, Suite 100, Irving, TX 75063-4706. Attn: Sara J Forgy. © 2009 Daedalus Enterprises

David J Pierson MD FAARC, Section Editor

Books, Software, and Other Media

In the Clinic: Practical Information About Common Health Problems From the Pages of *Annals of Internal Medicine*. Christine Laine MD MPH and David R Goldmann MD. Philadelphia: ACP Press. 2009. Soft cover, 382 pages, $59.95.

Many of us try our best to stay current with the latest journals and articles, especially when it relates to our daily work. I have been keeping a manila folder of various journal articles that I have every intention to read at some point. But every several months, as the folder gets ridiculously overfilled, its contents end up in the recycling bin. And then the process starts again. As a primary-care physician I accept the fact that I am never going to be able to keep up with the latest research on cancer treatments, but for common medical problems encountered on a daily basis, it is crucial to have the best information that will impact clinical care. The problem is that there is too much information. With the vast array of online and print media, where does one begin to look?

In the Clinic: Practical Information About Common Health Problems, as the title suggests, is intended to be a useful and practical resource for the busy clinic-based provider. Composed of 24 chapters, each covering a common primary-care problem, such as heart failure, migraines, low back pain, and asthma, it is a compilation of 2 years of review articles published monthly in the *Annals of Internal Medicine*. In the preface, the editors introduce **In the Clinic: Practical Information About Common Health Problems** as a way to "strengthen the connection between evidence and clinical practice" and "emphasize key knowledge that can readily be integrated into practice."

The core material is from the Physicians' Information and Education Resource (PIER), an online repository of evidence-based information for health-care providers at the point of care. Science writers and physician writers collaborated to adapt topics in PIER into a series of well written, easy to read, narrative reviews for **In the Clinic: Practical Information About Common Health Problems**. Each chapter was reviewed by outside experts for accuracy. It is meant for a range of training levels, with clinical students and new practitioners benefitting the most. However, even veteran clinicians and teachers will undoubtedly pick up several pearls in each chapter and enhance their understanding.

Each chapter is standardized to 15 pages in length and organized into similar sections: prevention, diagnosis, screening (if applicable), treatment, improving practice, and, finally, a page of patient information, which is meant to be photocopied and reviewed with patients. The information is presented in a series of clinical questions and answers, a format that effectively focuses the discussion around patient care. It is not meant to be exhaustive, but, rather, a concise, high-yield review for reading in one sitting. The topics are well selected and touch upon a range of common out-patient conditions. But as a general medicine book with only 24 topics its usefulness is somewhat limited. Presumably, subsequent installments will be published every couple of years with more topics. Also, at first glance the chapters appear to be in no particular order, until one realizes that they are presented according to their initial publication date in the *Annals of Internal Medicine*. While most are focused and contained, a couple of the chapters attempt to tackle enormous topics. As an example, the chapter on heart failure is a good overview but unable to provide the same level of detail found in other more narrowly defined chapters. For instance, the information on B-type natriuretic peptide, one of the most widely used tests, is covered in a single short paragraph. With that said, just about every other chapter provides an excellent review of the condition, with enough detail to be immediately applicable to clinical practice.

One of the most useful chapters for me was on influenza. In addition to learning several points that changed my practice, I used it to prepare a teaching conference for residents in my clinic. The "Prevention" section starts with basic information on "What kinds of influenza vaccine are available?" and "Who should be immunized against influenza?" but quickly moves to more sophisticated discussions such as "What is the role of antiviral agents in preventing influenza?" and "In whom is intranasal live attenuated influenza vaccine contraindicated?" The authors do a good job of anticipating common or important scenarios arising in clinic. In addition, the tables are helpful in summarizing the major points, such as the differences between 2 types of vaccine and the high-risk groups requiring annual flu shots.

The "Diagnosis" section similarly provides an important table on the frequency in which various symptoms and signs are present in patients with the flu. The one-page discussion on the appropriate situations to consider laboratory confirmation offers clear and practical advice. The "Treatment" section, which is two and a half pages, is an excellent overview of the pharmacologic treatment options, with references to the important studies. It also addresses when clinicians should consider hospitalization or when to obtain a consultation from an expert in infectious disease or public health. Avian flu is covered but, obviously, information about this year's H1N1 outbreak was available only after the book's publication. It should also be noted, however, that while the book's publication date is 2009, some of the earlier chapters were written almost two years prior. Consequently, the first chapter, on diabetes, misses a couple of important studies (ACCORD and ADVANCE)[1,2] published in 2008, on the effects of intensive glycemic control on vascular complications, and Chapter 2, "Smoking Cessation," does not include the safety warnings for varenicline publicized last year by the Food and Drug Administration.[3]

Overall, readers will find the recommendations clear and practical. The number of references is not overwhelming, but kept fairly selective, to include only the most important studies. When the recommendations are based on weak evidence or expert opinion, the authors are careful to state this. One feature that I really liked was the one or two-paragraph summaries of the relevant studies, which are interspersed throughout the main text. Printed in a slightly smaller italicized font, these "evidence" paragraphs provide a layer of depth for readers who desire more detail, and, conversely, can be skipped by those wanting just the clinically applicable points. And those in a real hurry can jump to "the Clinical Bottom Line" box, which distills the preceding section into a few sentences. This multi-layered format makes for a versatile resource and illustrates

the thoughtful planning that went into this book. I also noted that the citations were listed in the margin of the page, next to the corresponding text, rather than at the end of the chapter. Though seemingly minor, this physical proximity between text and citation helped to strengthen the connection between the clinical information and research.

In the Clinic: Practical Information About Common Health Problems is intended for general clinicians and trainees, but, as the editors point out, specialists (and therapists) can easily update their knowledge on areas outside of their area of expertise. Published by the American College of Physicians, it is high-quality work, presented in a succinct, easily readable, and welcoming format. Clinicians of all levels will learn new aspects of diagnosis and management of common conditions in this valuable resource.

Genji S Terasaki MD
Division of General Internal Medicine
Harborview Medical Center
Seattle, Washington

The author has disclosed no conflicts of interest.

REFERENCES

1. Action to Control Cardiovascular Risk in Diabetes Study Group, Gerstein HC, Miller ME, Byington RP, Goff DC Jr, Bigger JT, Buse JB, et al. Effects of intensive glucose lowering in type 2 diabetes. N Engl J Med 2008;358(24):2545-2559.
2. ADVANCE Collaborative Group, Patel A, MacMahon S, Chalmers J, Neal B, Billot L, Woodward M, et al. Intensive blood glucose control and vascular outcomes in patients with type 2 diabetes. N Engl J Med 2008;358(24):2560-2572.
3. Important information on Chantix (varenicline). United States Food and Drug Administration, 2008. http://www.fda.gov/drugs/drugsafety/publichealthadvisories/ucm051136.html.

Allergic Diseases Diagnosis and Treatment, 3rd edition. Phil Lieberman MD and John A Anderson MD, editors. (*Current Clinical Practice* series, Neil S Skolnik MD, series editor.) Totowa, New Jersey: Humana Press. 2007. Hard cover, illustrated, 484 pages, $99.

Lieberman and Anderson, leading personalities in American allergology, have edited an excellent piece of work. Anderson has written the chapters covering the difficult subjects of food and drug allergy, with a confidence that shows his complete mastery of the field. The book is characterized by the authors' clinical experience that allows them to make a balanced appraisal of new developments within the complex discipline of clinical allergology. All is written in a clear language with distinct advice as to treatment. Only parts, in particular some of the text on asthma, could have been updated more thoroughly.

The initial 3 chapters lay the foundation, with a survey of the pathophysiology and of available diagnostic techniques. Quite correctly, they emphasize the importance of the clinical history in the knowledge that a positive test (for example, for a certain allergen-specific antibody) does not justify the diagnosis of allergy, if there are no symptoms related to actual exposure. Like many of us, the authors use the time-honored acronym RAST (radio-allergo-sorbent test) for any test of allergen-specific immunoglobulin E (IgE), nowadays mostly enzyme-labeled assays, and they explain why. But we readers question their assertion that skin testing is more sensitive than RAST. The most recent generations of standardized in vitro tests, such as ImmunoCAP, do have a high sensitivity in respect of most allergens, and the assertion holds only for intracutaneous testing, which is not used in daily practice.

Anaphylaxis in an essential issue, most aspects of which are excellently covered in an extensive chapter. Well known facts, such as, "Penicillin and its derivates are one of the most common causes of anaphylaxis," and "Any food has the potential to cause anaphylaxis, but some foods are more allergenic than others, and these include peanuts, tree nuts, crustaceans, fish, egg, and dairy products," are interspersed with descriptions of relatively new insights of importance for the frontline physician, such as the existence of food-dependent exercise-induced anaphylaxis.

Epinephrine is the crucial drug for treatment of anaphylaxis. Regrettably, there are a couple of errors as to concentration and dose. Table 9, on page 69, states 1:100,000 for intravenous use, but probably 1:10,000 is intended. In the text below the same table is correctly written that a 1:10,000 solution should be given intravenously in the rare case of severe refractory anaphylaxis, but wrongly that 0.1–0.2 mL should be injected every 5–15 min: it ought to be 1–2 mL to get the therapeutic dose of 0.1–0.2 mg! These double errors, with regard to a condition for which it is literally vital to get the dosage right, are unfortunate. In addition, Table 9 contains a couple of spelling errors, which otherwise are few and far between.

Like the whole book, the anaphylaxis chapter is laudable for its pedagogic style. It contains well organized boxes with facts (eg, "Prevention Clinical Pearls"), where it is mentioned that after reaction to a medication, "a complete history is paramount in the prevention of prescribing a cross-reacting drug," and that, "all patients with food and insect anaphylaxis should carry an autoinjector of epinephrine on their body and not left in the car or at home." In "Treatment Clinical Pearls" it is stated that a patient with anaphylaxis should be placed in a supine position, with the legs raised in order to improve venous return.

The non-IgE reactions to radiocontrast media are dealt with briefly, but correctly, and it is, quite rightly, pointed out that there is no association to topical iodine solutions or to shellfish allergy, a long-lived misconception.

"Insect Sting Allergy" is one of many interesting chapters. There are some differences in relation to us working east of the North Atlantic: we have no aggressive Africanized honeybees and no fire ants, and, accordingly, rather seldom see toxic reactions from insect stings. Our experience with RAST (ie, ImmunoCAP) is that its sensitivity exceeds that of skin-prick test with insect venom. We almost never give lifelong venom immunotherapy and definitely don't add epinephrine or steroid to the allergen to prevent local reactions. Here we as allergist colleagues would have liked to see references, and, overall, the value of the book would have been augmented if there had been more of these. This is only partly compensated for by the suggested reading at the end of each chapter, where, for instance, Bielory, who gives an excellent coverage of the pruritic eye diseases (allergic conjunctivitis and vernal and atopic keratoconjunctivitis) in "Diagnosis and Treatment of Ocular Allergy" suggests a further 6 articles by his own pen.

The chapter "The Child With Asthma" is well written and easy to follow. However, some points are lacking. In the diagnostic section the focus is to a large extent on the use of dynamic spirometry and reversibility testing. But many young asthmatics have a normal lung function and improve on neither short-acting bronchodilators nor oral

steroids. For these cases the use of different bronchoprovocative methods, such as the treadmill or free running tests, should be discussed.

In the part dealing with asthma management the authors mention the use of air conditioners and HEPA (high-efficiency particulate air) filters. The documentation for a real health benefit from this equipment is still very weak and should thus be mentioned with reservations. We would also have liked to see discussed how disease activity in asthma should be monitored. The use of peak-flow measurement is recommended. However, it is well known that the absolute peak-expiratory-flow (PEF) level does not provide much information on disease activity, while PEF variability is quite informative. Moreover, new tools to monitor airway inflammation, such as exhaled nitric oxide, should also have deserved mention. The table "Referral to an Asthma Specialist," at the end of the chapter, is valuable and concise.

The chapter dealing with adult asthma gives the feeling of having been written some years ago, merely updated with some recent information. The important link between lower and upper airways is only briefly discussed, in the context of sinusitis being a risk factor for asthma exacerbations. Other important risk factors for loss of asthma control are obstructive sleep apnea, and, perhaps most important, psychological factors, including depression, anxiety, and insufficient adherence to therapy, which also is not emphasized. Moreover, looking in the other direction, it has been shown that dysfunction or disturbances of the peripheral "small" airways are associated with increased risk of asthma exacerbations. In Table 13, forced expiratory volume in the first second (FEV_1) is used as one important component in the grading of asthma severity. We believe it is more and more obvious that the lung function per se does not predict severity in asthma, This is one of the reasons why the new Global Initiative for Asthma (GINA) guidelines put greater emphasis on symptom control, exacerbations, and treatment requirement as indicators of disease severity.

The chapter "Allergic Rhinitis" gives a nice overview of the pathophysiology and differential diagnosis, but, again, the connection between asthma and rhinitis could have been emphasized more.

In the chapters about skin diseases, in this context atopic and contact dermatitis, and urticaria, a good overview of the field is given, pedagogic and well written, like most of this book. However, this topic especially would have gained from illustrations in color.

It is rightly emphasized that chronic urticaria often has an autoimmune origin, and that an important proportion has physical triggers, but that the cause almost never is allergic: the majority of cases are idiopathic.

Regarding the features of atopic dermatitis, the focus is on children and adolescents, which gives the chapter a pediatric perspective. The importance of allergens from microorganisms such as the yeasts *Malassezia* and *Candida*, as activating factors for eczema, is pointed out. The immunpathology of atopic dermatitis is, as the author concludes, complex and not fully elucidated, but the roles of IgE and T lymphocytes are briefly described. The ongoing discussion concerning extrinsic (IgE-mediated) and intrinsic sensitization could have been mentioned, as it is reported that the 2 mechanisms could have dissimilar impacts on the development and persistence of the disease. In the review of the current therapeutic arsenal it would have been of value to get some information on the use of ultraviolet light therapy, as many authors in the field consider it a well reputed therapy for atopic dermatitis.

The theme contact dermatitis is introduced with enthusiasm. Typical signs and possible differential diagnoses are explained in an easy and pedagogic style. On the whole, one gets a good overview of the disease and its management.

The complex topics of food and drug allergy are treated in the excellent next 2 chapters. It is pointed out that most allergic reactions to foods are of type 1 and involve IgE and that, on the other hand, most isolated gastrointestinal reactions to diet are not the result of food allergy at all. Proven adverse reactions to food additives are uncommon. Peanut is of course especially mentioned, as it is one of the dominating allergens. There is evidence indicating that the prevalence of peanut sensitivity is on the increase. The recommended management is strict avoidance, but there is hope for future immunotherapy. Thus, successful treatment with an experimental recombinant peanut protein has been demonstrated in mice. Furthermore, humanized monoclonal anti-IgE, binding to IgE receptors on mast cells, has been shown to increase tolerance in individuals with prior peanut anaphylaxis, showing the way to another possible new therapy in food allergy.

The drug allergy chapter succeeds in giving detailed and relevant information about reactions to different medications, in the shape of excellent overviews as well as practical test/challenge/desensitization protocols. Examples of statements in one of the overviews are: "Most reactions do not involve immune events." "A skin rash is the most common type of drug reaction." "Most drug reactions occur in adult females and individuals who are frequently intermittently exposed to multiple medications." "More allergic drug reactions occur to β-lactam antibiotics than to other antibiotics." and "Reactions to RCM [radiocontrast media] and aspirin/NSAIDs [non-steroidal anti-inflammatories] are frequent causes of allergy-like or non-immunologic reactions." All true! Among selected drug reactions, those to penicillin are prominent. It is mentioned that positive skin test to minor determinant mixture correlates with anaphylaxis. In contrast to the United States, we in Europe enjoy the privilege of having the kit commercially available.

A substantial part of the book is devoted to the pharmacology of asthma and allergy drugs, from antihistamines to anti-IgE antibodies. The chapter about antihistamines is new for this edition and, of course, has its place, as these are first-line therapy of allergic rhinitis and, since long, also of urticaria. Hence, we don't agree with the statement that they are becoming *increasingly* important in the treatment of the latter. Neither do we find it true for atopic dermatitis and asthma, but here for the opposite reason, that antihistamines continue to play only a minor role in these diseases. Anyway, the reader gets an excellent review of pharmacodynamics, pharmacokinetics, and adverse effects for all pertinent drugs, which increases the book's value as a reference source.

Chapters 18–24 deal with different treatment alternatives, from β_2 agonists to anti-IgE. Each treatment is dealt with very much on its own, and some aspects highlighting the positive effects of combined use should have been included. This becomes especially clear in the chapter on β_2 agonists. The potential hazards of regular use are stressed. The Salmeterol Multicenter Asthma Research Trial (SMART) study is mentioned but could have been discussed more critically. This is especially important for the long-acting β_2 agonists. We have nowadays

substantial data documenting the benefits of combining inhaled corticosteroid therapy with long-acting β_2 agonists, both salmeterol and formoterol. The author states that long-acting β_2 agonists should be "used under very special guidelines" and "not be used for acute symptoms." This statement is in clear contrast to the documented positive effects of budesonide and formoterol, both for maintenance and as reliever therapy.

The chapter on theophylline is well written and updated, and is a good review of the subject. Maybe it could have a little more critical view on the use of this drug in modern asthma management. The 4 times shorter (!) anti-leukotriene chapter is also well written and reasonably well up to date, but the systemic aspects (ie, the effect on both asthma and rhinitis) could have been addressed.

Chromones are dealt with in a separate chapter. So is the use of anticholinergics. Both treatments are well described, although both have a very limited place in modern asthma management.

The chapter on glucocorticosteroids provides a comprehensive overview of both systemic and inhalational therapy. The Childhood Asthma Management Program (CAMP) study is mentioned as evidence for long-term safety. In this context it could be worth mentioning that long-term budesonide treatment did not prevent lung-function decline and that there are components in the inflammation in asthma that do not respond to corticosteroids. Moreover, the doses recommended to treat exacerbations are rather high, and perhaps somewhat out of date.

The chapter on anti-IgE treatment is up to date, not least in respect to the relevant pathophysiology and the mode of action. Interesting future uses, such as treatment of allergic disorders other than asthma, are mentioned. Anti-IgE is expensive and the treatment indications are therefore perhaps more restrictive than they would have been, had the price been less.

Specific allergy treatments are environmental control and allergen immunotherapy. Two chapters are devoted to these issues.

As for mites, single intervention with bed covers hasn't shown an effect on asthma, but keeping indoor humidity below 50% has, especially in tropical areas with very high humidity. The summary recommends that dust mite avoidance measures should be discussed with mite-sensitive patients, which we think is reasonable, and is in line with our attitude to other indoor allergens. Pets should be removed when allergy is present, even if zero allergen level isn't achieved, especially not with cat allergens, which are shown to be ubiquitous. The concentration is crucial, and is definitely highest in homes with pets.

The allergen immunotherapy chapter is updated with the latest knowledge of induced immunological changes. It doesn't bring up any controversies, except the fact that unstandardized allergen vaccines are still in partial use. Perhaps too little is said about sublingual immunotherapy that is now available, at least in Europe, for some allergens (eg, timothy), after successful controlled studies.

Practical aspects on immunotherapy are mentioned, as is the fact that successful allergen immunotherapy ameliorates but usually does not completely eliminate the respiratory symptoms in allergic rhinitis and asthma.

That controversies in allergy has its own chapter is not controversial: it is important that physicians are made acquainted with unproven methods, in order to avoid them and be able to use arguments based on facts when talking with patients, who can be misinformed about, and hence be appealed by, unsubstantiated techniques. You can only agree with the declaration that it is important to use methods of diagnosis and treatment that are based on sound scientific principles and have been validated by proper clinical trials.

The very last chapter, about the patient with too many infections, is a new one and defends its place. It is imperative to be able to distinguish benign reasons for recurrent infections from an immunological deficiency syndrome in need of treatment.

Finally, although this review has given some criticism, we find the book very suitable for its purpose and congratulate its editors. Their hope, proclaimed in the preface, that "the book should give practical knowledge, delivered clearly and effectively to the physician who cares for the allergic patient," has been fulfilled.

Leif H Bjermer MD
Sonja Werner MD
Respiratory Medicine and Allergology
Lund University Hospital
Lund, Sweden

The authors have disclosed no conflicts of interest.

From Both Ends of the Stethoscope. Thomas L Petty MD. Denver: Dr Tom Publishing. 2008. Soft cover, illustrated, 139 pages, $14.95.

The early 1960s was a time of great changes in the field of pulmonary medicine; other specialties, especially cardiology, had been able to bring new technologies directly to the patient, making possible more accurate diagnoses and amazing therapeutic results. Thomas Petty was there at the beginning and was truly one the foremost leaders to bring about the change at the University of Colorado, where important discoveries took place. It was my good fortune to be at the University of Colorado as a pulmonary fellow the year prior to Petty beginning his fellowship. At that time, active research in pulmonary disease was going on, patients were being studied, but the technology was not yet developed that could be used at the bedside, so treatments for chronic obstructive pulmonary disease (COPD) and respiratory failure were pathetically meager. The physiology of blood gases was often being studied at altitudes higher than Denver—up on Mt Evans—on cows or horses. As Petty describes his medical student days while learning physical diagnosis, he was not shown how to use a simple spirometer—though the instrument was available at the time. What was available then and still used by most doctors throughout their professional careers was the stethoscope, and its importance is a running theme of this small but important book.

Tackling COPD is the first challenge Petty describes, and how his efforts led to some eye-opening discoveries. The observation that many patients with advanced emphysema have striking elevations of their red blood cells led the author, while caring for one of his earliest patients, to suspect and work him up for polycythemia; it took a hematologist to point out to this tyro pulmonologist that chronic hypoxia can induce polycythemia. Basic medical knowledge? I have over the years occasionally seen doctors make this mistake. One of the old ideas that Petty did put to rest concerned the danger of giving patients with emphysema continuous oxygen, long believed to result in a dangerous accumulation of carbon dioxide in the blood. Disproving this required the measurement of blood gases, something that had been possible for many years but required long labor-intensive work. Development of the modern blood gas analysis ma-

chines made it possible to monitor COPD patients while receiving low-flow oxygen and to *prove* it to be safe. This one small step made possible the development of long-term oxygen therapy.

The next step taken after finding how safely continuous low-flow oxygen might be employed was to devise a mechanism to deliver it. By employing a liquid-oxygen unit called the Linde Oxygen Walker it was possible to study the effects of supplemental oxygen on exercise and other rehabilitation techniques. It was rewarding to see how it improved hypoxia, reducing excess red-blood-cell production and levels of pulmonary hypertension. Continuous oxygen given up to 18 hours a day has been shown to increase both the length and quality of life for COPD patients. Today such portable units are ubiquitous and patients are living more active lives, not possible before Petty took on and solved some of the initial problems.

In the second chapter of his book Petty describes what is probably the most important discovery to come from the Pulmonary Division of the University of Colorado: the acute respiratory distress syndrome (ARDS). The history of this discovery is important and well presented by detailing how unique features of the syndrome were recognized and differentiated from heart failure with pulmonary edema, which in many respects it resembles. For years it was believed that the extreme symptoms of dyspnea and pulmonary congestion that followed certain infections, trauma, and shock from various causes were due to heart failure, even though the patient might have neither a history of heart disease nor evidence of primary heart damage. Two new developments led to solution of this problem: first there was the easy availability of blood gas analysis, and second the improvement in ventilators, permitting oxygen to be delivered with pressure. It was noted in these patients that the lungs became stiffer, and as they did so hypoxia developed. When the oxygen pressure was increased, especially the pressure at the end of expiration, the lungs opened up and hypoxia was relieved. The final observation, which capped the study, was that the frothy material coming from the lungs in these patients was different from that found in heart failure: it lacked surfactant (the substance that maintains the shape of normal alveoli); instead it was a unique proteinaceous substance. These were shock lungs, and they were the target of a process initiated by any of a variety of bodily insults. The acute respiratory distress syndrome was born.

The section describing the development of oxygen therapy, long-term oxygen therapy, and ARDS is one of the best in the book. Clearly presented, this important material can be of value to a lay person as well as the professional; doctors, especially those who may not work in the pulmonary or related fields, will find brief, accurate descriptions of these subjects, and not presented in a "dumb down" manner.

Part 2 of the book is a collection of vignettes describing cases and events with which the author was involved. The cases were patients with a variety of pulmonary problems, and seemed to exemplify Petty's extraordinary skills as a diagnostician, compassionate counselor, and friend to rich and poor alike. His well deserved reputation led him to be invited all over the world and meet famous people to whom he was always ready to provide even a small bit of medical advice. Despite this almost peripatetic life style, he reports he also made house calls. His travels also seemed to involve him in historical events of the time. An invitation from Union Carbide brought him to Bhopal at the height of the disaster there, and some adventures were described by him as being "like a James Bond movie." What is not clear was why he was invited to Bhopal in the first place. Finally he records contact with an elderly, very poor lady in Alabama—Selma, of course. Initially she described her medical problems (via telephone) … he suspects sarcoidosis … she responds that has been ruled out … she describes her association with Dr King and the march in Selma… Petty sends her money for telephone bills. A single trip to Alabama provided the only opportunity to visit this poor lady. They continued to communicate, via mail, until her death. We never learn any more about her medical problem. I found this section of the book the least satisfying.

Beginning in 1992, with his first open heart surgery, Petty has experienced a series of health issues that often brought him to death's door, challenged the skills of his caregivers, and revealed his own faith and courage. These experiences enabled him to describe these ordeals from the unique perspective of a physician very familiar with the health-care system, hospitals, nurses, and physicians, and how they meet expectations as well as how they fail to do so. Petty's experience at a major medical center is an example of a conflation of miscommunications, oversights, misunderstanding, and neglect. We've all heard examples of human failings in all types of institutions, regardless of their reputations. Even in his own home, Denver, a close colleague failed to respond to his cry for help. This story also makes the point that seeking greater knowledge or skill at some distant center because of its reputation may not meet expectations. Often the consultation one seeks may just as likely be found in one's own medical community. Kudos go to Petty for not succumbing to the temptation to bring a malpractice action; he certainly had grounds to do so. I'd like to think his decision was informed by his own experience working in a large medical center, and perhaps the wisdom and humility arising from his personal health travails. It certainly made him aware of the problems in the health-care system and the need to continually reinforce the oft-forgotten essentials of patient care.

In the final section of the book Petty takes up specifics of the health-care system, which he describes as really not being a system at all, but a "patch-work of services" with a variety of means of payment or the absence of any. I can't disagree with that, but cannot subscribe to his view that the people can or will *directly* determine how it will be in the future. Of course he brings up comparisons with the Canadian system and how it fosters long waiting lines as well as difficulties getting specialty services when wanted. I have heard all this before and have generally been sympathetic to it; however, it is my observation that there are many areas with similar conditions here in the United States. Though I have heard Canadians complain about their health care, I have also talked to some who are quite satisfied with the program in Canada.

Are the expectations of American patients too high? There are many who, along with Petty, think they are, and efforts to lower them will not be easy. Petty points to surveys that grade degrees of dissatisfaction for various complaints, and, as noted in his book, he shares some of them. Many of the complaints result from conditions over which physicians have had little control, others concerning personnel behavior and attitude must be dealt with by continual education and self-examination. Toward lawyers he expresses opinions held by many physicians, who point to the damaging effect of the "defensive medicine" that so many doctors are being forced to practice. I take

issue with him over an aspect of end-of-life problems exemplified by the famous case of Terry Schiavo, that he believes could have been avoided by having a living will. I strongly endorse people having such end-of-life documents, but I also believe that in heated controversy over high-profile cases, legal sophistry can and often does override common sense. I also differ with Petty on his view of health-maintenance organizations (HMOs). Many of these groups have failed for reasons that seem justified, but based upon my own experience working for a successful HMO for almost 30 years, I can say the care given to its members has been the equal of that in the community. In addition many of the complaints made by people in other care programs have long ago been solved by my HMO. Petty's complaint against the pharmaceutical industry is valid but tiresome. Making a profit is the oxygen that keeps these industries alive, and I too am disgusted with the direct advertising to patients, the exorbitant costs of new drugs, the shady attempts to manipulate clinical results of drug testing, and failure to invest particularly in research for orphan drugs, but I remain skeptical of the suggested alternatives to our present system.

The author has some advice for patients to help get the most out of our system of health care. I was struck by the naïveté in his recommendation that patients "insist that doctors take enough time to get to know us." Most doctors in full-time practice have limits on the amount of control they have on their time, and we all have seen patients who, given the opportunity, go on and on, oblivious to the fact that the meter is running and others are waiting. He also admonishes patients to "begin to redirect medicine," which I also take issue with, because patients can't do it. There was a time when doctors could do it, but no longer. More and more doctors have become employees, referred to as providers, and as such they carry no more influence than others who are viewed as "caregivers."

The last item Petty discusses I strongly applaud: the return of spirituality to the practice of medicine. I do not mean the direct injection of a doctor's religious beliefs; rather, to be aware of and to encourage the expression of any, possibly latent, spiritual beliefs the physician may discern. I am sure Petty's opinion on this matter reflects his experience as a patient as well as a physician, and I hope his view that spirituality is returning to medical practice is true; so many parts of this country are Laodicean, such changes will be difficult.

This is a very useful book that should appeal to most professionals working in pulmonary medicine; for doctors it should be of greater interest to those not specializing in pulmonary disorders, and those who want a brief but clear discussion of oxygen therapy, ARDS, or COPD will find it here. Medical students will find value from those sections dealing with the broader areas of medical practice as presented by an experienced physician. The book is well written with clear illustrations, though some of the photographs are somewhat blurred. There is no index, but a glossary is offered, which may be of most value to the layman, rather than to anyone already working in health care.

William F Spence MD
Pulmonology (Retired)
Group Health Cooperative of Puget Sound
Seattle, Washington

The author has disclosed no conflicts of interest.

Clinical Asthma. Mario Castro MD MPH and Monica Kraft MD. (*Expert Consult* series.) Philadelphia: Mosby Elsevier. 2008. Hard cover, illustrated, 532 pages, $134.

The book is composed of 7 sections: asthma in the 21st century; diagnosis of asthma; assessment; management; treatment; special situations in the management of asthma; and education.

As an *Expert Consult* title, the book is useful to researchers and physicians, especially the sections on diagnosis, assessment, management, treatment, and special situations in the management of asthma. But respiratory therapists and nurses will find this book interesting in the sections on acute asthma management in hospitalized and intensive-care patients. The sections on environmental modification, allergen avoidance, teaching patients to manage their asthma, and asthma education are really what respiratory therapists, nurses, and asthma educators need.

Based on the 2 most important and updated guidelines, the Global Initiative for Asthma (GINA 2006) and the 2007 National Asthma Education and Prevention Program (NAEPP) Expert Panel Report 3, combined with the contributions of world experts in asthma, the authors have achieved their aims in providing a practical and useful resource for health-care practitioners in asthma management.

The material is well selected and organized. Clinical pearls of wisdom precede each chapter and help the reader to grasp key concepts. The arguments are clear and logical. Based on the 2 prestigious guidelines and references from renowned journals, the statements of fact are generally accurate. The style is clear, concise, and readable.

The chapter on the natural history of asthma into adulthood is very interesting. It raises the very important issue of protecting asthmatic children from fixed airway obstruction, which is very common.

Box 5.5 details the differential diagnosis possibilities of asthma, which is very important, but the term "recurrent cough not due to asthma" is not specific enough to be considered a cause.

The whole chapter "How Do You Diagnose Asthma in the Child?" is very important, as diagnosis is much more difficult in this patient group. The differential diagnosis in the chapter on diagnosing asthma in adults is helpful.

The chapter dealing with pulmonary function tests, which describes the elastic properties of the lungs and chest walls, pressure-volume curves, and the static pressure-volume relationship of the lungs, is not very practical for daily management of asthma. A more detailed text and illustrations of full flow-volume curves from spirometry would be much more useful.

In the chapter on clinical assessment of asthma, the part of self monitoring is very informative. The section "How Do You Classify Asthma by Severity?" compares the classification methods of NAEPP and GINA.

The section on instruments for assessing asthma control is rich and introduces the important concept of the 2 asthma-control domains: current impairment and future risk.

In the section on management of persistent asthma in children, cromolyn and nedocromil are introduced as medications for prevention and treatment of mild persistent asthma, but the authors don't comment on the weak evidence about and debatable efficacy of these drugs.

The pros-and-cons tables in the section on management of persistent asthma in adults are real pearls. They provide convincing, original, and important arguments

that will help physicians choose appropriate strategies.

The whole chapter on monitoring for adverse effects of treatment is excellent. The adverse effects, monitoring parameters, and prevention strategies in Table 35-2 give clear guidance on this important issue.

The section on treatment, which provides details on new medications such as soluble tumor-necrosis factor (TNF) receptor, humanized anti-TNF, and anti-interleukin-1β antibodies, is interesting, as these are usually presented sparsely in the guidelines.

I believe the section on special situations in asthma management will satisfy clinicians, as it details all the common and rare situations.

The last section, on asthma education, is very special, as it provides in-depth discussion of many aspects of this important issue: among them the very difficult problem of improving patient adherence to therapy. Evaluation of individual and program outcomes, which are often neglected topics, is discussed in a whole chapter!

I have some suggestions for a future edition:

- Figures 3-1, 3-2, and 3-3 should be more fully explained.
- On page 64, in the passage "β-agonist responsiveness 12% improvement of FEV_1 or an increase of 200 mL," that "or" should be "and" (as on page 69).
- On page 65, the passage "$FEI_{50}/FEF_{50} > 1$" should be "$FEF_{50}/FIF_{50} > 1$."
- On page 128, "$FEV_1/PEF \geq 60\%$" should be "$FEV_1/FEF \leq 60\%$."
- On page 166, the legend of Figure 19.1 should define the abbreviations in the figure.
- On page 170, the dagger symbol (†) should have a corresponding footnote.
- On page 171, Figures 19.4 and 19.5 are purported to give treatment steps, but they only have classification of asthma severity and control.

The general appearance of the book is attractive. I found no typographical errors. Most of the illustrations are clear. The references cited are from peer-reviewed journals and are very good. The index is useful, and readers will find topics easily.

The authors achieved their stated aim of providing an authoritative, up-to-date source about asthma. The book provides a comprehensive yet practical review and a useful overview of recent research. Clinicians, educators, researchers, and students will find this book very helpful.

Le Thi Tuyet Lan MD PhD
Respiratory Care Center
University Medical Center
University of Medicine and Pharmacy
Ho Chi Minh City, Vietnam

Dr Lan has disclosed relationships with GlaxoSmithKline, Boehringer Ingelheim, Astra Zeneca, and Merck Sharp and Dohme.

Manual of Emergency Airway Management, 3rd edition. Ron M Walls MD and Michael F Murphy MD. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins. 2008. Soft cover, illustrated, 432 pages, $59.95.

In the last few years there has been a marked increase in airway-management devices introduced to the United States market. Even existing products such as the laryngeal mask airway have witnessed a dramatic increase in product design modification, in an effort by companies to achieve a "competitive edge" and sway clinicians toward the use of one product versus another. These "new and improved" airway devices will, hopefully, result in an increased ventilation/intubation success rate in experienced hands, with the ultimate goal of improving patient outcomes and reducing emergency airway management-related morbidity/mortality.

This decade has also seen an increasing trend toward the use of "visual aids" to intubation, evidenced by the different video laryngoscopes introduced in recent years, to the point that "blind approaches" to airway management are increasingly frowned upon as technology advances and the risks of blind approaches on patient safety are coming to the forefront.

One of the strengths of the **Manual of Emergency Airway Management** is its ability to compile the different airway-management devices and tools and review their indications and their roles in the difficult-airway management algorithms, while providing clear illustrations on the steps involved in their use.

The authors have identified that "emergency" airway management is not a time for trying out new equipment, and therefore walk the readers through a step-by-step approach to familiarize them with the proper techniques of using airway tools.

The **Manual of Emergency Airway Management** is divided into 7 sections. The first section takes the reader through a series of "logically flowing" chapters. The reader is introduced to the indications of intubations, followed by the "core" chapter on the emergency airway algorithms. This is by far the hardest chapter to digest, and, despite the author's attempt to provide a basic overview of the universal emergency airway algorithms and how the different algorithms interact, it requires more than one reading in order to be able to reproduce the steps in an emergency situation. In addition, some parts of the difficult-airway algorithm may be confusing, such as the author's statement that, "if there is a reasonable likelihood of success with oral intubation, despite the difficult airway, then rapid-sequence induction (RSI) may be undertaken." The authors, however, explain their rationale for this approach in Chapter 7, "Identification of the Difficult and Failed Airway," and help the reader in understanding the dimensions and predictors of a difficult airway.

Chapter 5 of this section is a must-read for anyone involved in airway management. It uses comprehensive illustrations to teach the most important skill in airway management: the ability to provide effective bag-mask ventilation.

A drawback in this chapter is the use of non-transparent face masks in the illustrations. The disadvantage of these masks, as the authors mention in the text, is the lack of immediate recognition of regurgitation of stomach contents, and the potential for subsequent aspiration, since these non-transparent masks block the operator's view from recognizing what's underneath the mask. Unfortunately, the authors also chose to use the same type of non-transparent mask for their front-page illustration, which can give the reader a false impression that the book is outdated.

Each chapter in section 2 is dedicated to the step-by-step, illustration-enhanced description of an intubation technique (lighted stylet intubation, flexible fiberoptic intubation). I found this section a very effective teaching tool for enhancing the clinician's familiarity with airway equipment and its correct use. Even airway management experts are likely to find an airway gadget in those chapters that they have not utilized before.

Section 3 is a review of pharmacologic agents used during rapid-sequence induction. While Chapters 18 and 19 of this section focus on induction agents and muscle relaxants used during RSI, Chapter 17 describes the use of adjuvant or "pretreatment medications" that are used immediately prior to RSI to reduce the deleterious consequences of RSI on hemodynamic (hypertension and tachycardia), respiratory (coughing, bronchospasm), and central-nervous systems (increased intracranial pressure). The authors describe in detail the pharmacokinetic and pharmacodynamic effects of fentanyl and lidocaine, and give an evidence-based approach to rationalize their recommendations on drug dosages. The authors also explain their rationale for removing previously recommended "adjuvant" medications, such as atropine and defasciculating doses of non-depolarizing muscle relaxants, from the pretreatment algorithms.

Chapter 17 is an elegant review of induction agents, and its evidence-summary portion tackles pertinent clinical dilemmas in an evidence-based fashion, such as risk of adrenal suppression with the use of etomidate, especially in patients with sepsis syndrome.

The inclusion of "sedative" in the title of this chapter, "Sedative Induction Agents," may be misleading, since the ultimate goal of induction agents is to achieve hypnosis. In patients with compromised hemodynamics, the use of lower doses of induction agents can still achieve hypnosis, while in patients with marked hemodynamic instability (near arrest), the use of amnestic agents such as scopolamine should be discussed.

Chapter 19 includes a comprehensive review of the pharmacology of muscle relaxants, including a discussion of pertinent contraindications to the use of succinylcholine.

The depolarizing neuromuscular blocking agent succinylcholine is erroneously listed as a competitive muscle relaxant in the title of the paragraph (page 249). This is most likely a typographical error, since it is described correctly in the body of the text. Typographical errors are quite rare in this manual, which speaks to the editors' thorough and meticulous review of each chapter.

The **Manual of Emergency Airway Management** can be considered a "crossover" between an actual manual and a textbook, with fluctuations in the level of detail provided across chapters. While some chapters offer an in-depth review (Chapters 18 and 19) that approach the contents of textbooks, other chapters (Chapters 37 and 38) can be used to gain a basic understanding and an initial overview of the topic. Consequently, the number of references after each chapter vary from as few as 4 to as many as 102.

The editors, by including and updating the sections on pediatric airway management (section 4), emergency medical services airway management (section 5), as well as airway management in special circumstances (eg, trauma, increased intracranial pressure, reactive airway disease, pregnancy) managed to draw more readership and increase the value of this manual. The authors of these chapters provide a concise, disease-specific, up-to-date review of airway management in special clinical circumstances. This is followed, in each chapter, by an evidence-based review of pertinent clinical questions. For example, Chapter 28 offers the reader the ability to review the airway management for a patient with increased intracranial pressure (Chapter 28) in a focused format, without having to collect the "bits and pieces" from the various chapters of the book.

Although the authors briefly describe the utility of airway exchange catheters as part of the extubation algorithm for high-risk patients (Chapter 31, on the critically ill patient), a detailed description and illustrations of the different types and sizes of airway exchange catheters and their proper use is missing. Most airway complications related to airway exchange catheter use occur as a result of their improper use, highlighting the importance of their inclusion as part of this manual.

In addition, I would have liked to see a chapter dedicated to the emergency airway management of the patient presenting with massive hemoptysis, with an emphasis on techniques required for initial lung isolation (double-lumen tubes, bronchial blockers).

The readership of this book should include all clinicians that act as primary responders, whether in the pre-hospital or in-hospital setting. These include emergency department physicians, residents, respiratory therapists, critical care nurses, and emergency medical services personnel. Anesthesiologists will particularly benefit from the elegant review of various airway-management tools offered in section 2 of this manual.

The **Manual of Emergency Airway Management** is well organized, clearly written, and contains a wealth of information. It has a clinically oriented approach to airway management that can be appreciated across chapters. The evidence-based section in each chapter provides the reader with knowledge, insight, and an evidence-based recommendation on an important airway management dilemma that clinicians face in their practice. The reader awaits this evidence-based review at the end of each chapter with great enthusiasm, knowing that the authors will provide convincing answers to important airway management-related questions. The editors are to be commended for gathering a group of talented and experienced national authors, experts in the field of airway management, to pour their expertise into this manual.

Maged Y Argalious MD MBA
Department of Anesthesiology
Cleveland Clinic Lerner College of Medicine
and
Anesthesiology Institute
Cleveland Clinic
Cleveland, Ohio

The author has disclosed no conflicts of interest.