

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 is an essential issue, most aspects of which are excellently covered in an extensive chapter. Well known facts, such as, "Penicillin and its derivatives 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 life-long 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 immunopathology 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, show-

ing 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 of 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-