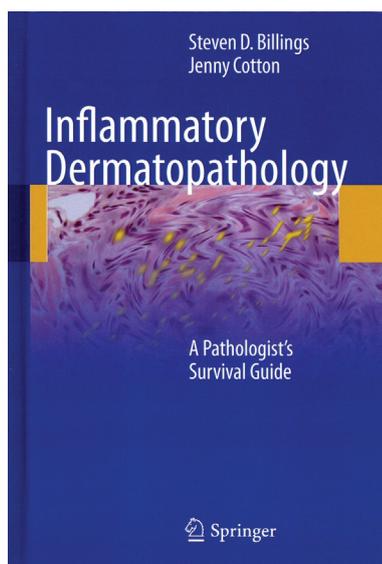


Billings SD, Cotton J. Inflammatory Dermatopathology. A Pathologist's Survival Guide. New York: Springer Science + Business Media LLC, 2011

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Billings SD, Cotton J. Inflammatory Dermatopathology. A Pathologist's Survival Guide. New York: Springer Science + Business Media LLC, 2011. 253 pp with index, \$189.00.

disorders, nodular and diffuse dermatitis, palisading granulomatous dermatitis, and sclerosing dermatitis. Chapter 10 covers bullous dermatoses, while chapter 11 discusses panniculitis. Infections are the topic for chapter 12. In chapter 13, miscellaneous dermatoses are reviewed, including invisible dermatoses and inflammatory processes that clinically mimic tumors. A table of contents is present at the beginning of the book, as well as an index at the end. The book has a mixture of both text, which predominates, and color histological photographs. Each chapter is organized in a similar format, which begins with keywords that include the entities to be discussed, followed by a short paragraph describing or defining the reaction pattern to be detailed. This is followed by a schematic representation figure of the reaction pattern, which is a cartoon drawing showing the epidermis, dermis, and subcutis with the location of the pertinent changes of that pattern. Specific entities under this general reaction pattern are then outlined as separate topics. Each of these entities has separate sections that cover clinical features, microscopic features, and differential diagnosis. In addition, each of the entities includes at least one, if not more, color microscopic photographs, as well as two separate charts, one for the key microscopic features of the entity and the other with practical tips for the entity. Some of the photomicrographs for the separate entities are of H&E stained sections, and some are of, or also include, pictures of special or immunohistochemical stains. In addition, there are some photomicrographs of entities discussed only in the differential diagnosis section. Each chapter concludes with a section of sample reports for

Review by Sarah N. Walsh, M.D.

Inflammatory Dermatopathology. A Pathologist's Survival Guide by Steven D. Billings, M.D. and Jenny Cotton, M.D. is a 253-page hard cover text. The contents of the book consist of a preface, an introduction, and 12 separate chapters. The chapters are organized according to basic cutaneous reaction patterns that include both epidermal and dermal patterns. Chapters 2-9 (chapter 1 is the introduction) are arranged from superficial to deep cutaneous processes, and include spongiotic dermatitis, psoriasiform dermatitis, interface dermatitis, perivascular dermatitis, vasculitis and thrombotic

most, if not all, of the separate entities discussed, followed by a list of selected references.

While the introduction chapter of many books is often low-yield, this introduction was worth reading and provided practical information, most notably regarding tips about putting together a pathology report.

The section on each separate entity is brief and condensed, covering only the most pertinent features and details with only one, and less often more, accompanying histology photographs. While a more elaborate discussion and photographic depiction of each entity is lacking, that is not the intention or format of this book. The discussion of each entity is true to the authors' purpose of this being a "survival guide."

The two tables that accompany each entity described are effective. These provide a short summary of the pertinent microscopic features and practical high-yield tips that assist in making the diagnosis or in excluding similar entities in the differential diagnosis. Clinical clues that aid in making the diagnosis are also included in the "Practical tips" table. Another table in chapter 5 ("Perivascular dermatitis" chapter) that lists both the superficial and superficial and deep patterns by the type of inflammatory cell that predominates then lists the differential diagnoses under each was also extremely handy.

The microscopic photographs are of good quality, and there is an appropriate mixture of low, medium, and high power views.

There were many small details for certain entities that were included, which are useful in everyday practice, including when to request additional, control, or deeper biopsies and general guidelines for normal ratios (CD4 to CD8, mast cells, and melanocytes to keratinocytes).

The one thing that truly sets this book apart from other books on inflammatory dermatoses, is the section on "Sample reports." For those who do not practice dermatopathology daily, or for those who do but are in the phase of developing a style, this is an excellent reference. It covers cases in which a definitive diagnosis can be made, but more importantly includes examples of when the diagnosis is less clear-cut, and how to handle these more common and more difficult cases. While the report format may not be the style preferred by the reader, it provides good ideas to help communicate differential diagnoses or important histological features.

There were only a few points that may be confusing or need clarification for the reader:

1. Under the differential diagnosis of prurigo nodularis with squamous cell carcinoma (page 32), it states that prurigo nodularis can show "reactive atypia but lacks pleomorphism." Many in the pathology world incorrectly equate "atypia" to pleomorphism, and because atypia is not well defined or the meaning not agreed upon, this sentence becomes very confusing.

2. In the sample report on page 142, caution should be advised in using "interstitial granulomatous dermatitis" on the diagnosis line because this term is synonymous with a specific entity that is often associated with rheumatic disorders.

3. Cutaneous mastocytosis should probably not be covered as a separate section in a book on inflammatory dermatoses, as this is an abnormal growth and accumulation of a clone of mast cells, and therefore, is best categorized as a neoplastic, and not inflammatory, disorder. The same holds true for the section on anaplastic large cell lymphoma. In addition, lipodermatosclerosis is considered by some to be a fibrosing condition, and not a true panniculitis.

Inflammatory Dermatopathology. A Pathologist's Survival Guide is an easy to navigate, easy to read text that covers the most common inflammatory entities encountered in daily dermatopathology practice. The summary tables and sample reports are exceedingly useful and give this book the edge over similar texts. It is not only a practical resource for surgical pathologists and residents in their approach to inflammatory diseases, but also contains valuable tips for the more seasoned dermatopathologist.

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Review by Almut Böer-Auer, M.D., Ph.D.

In the preface, the aims of this book are mentioned to be to "demystify inflammatory dermatopathology," to be "a practical resource," and to "provide examples on how we approach signing out our cases." The intended readership is defined as "surgical pathologists and residents." I have to admit at the outset of this review, that I am neither a surgical pathologist nor a resident but a dermatologist/dermatopathologist and a coauthor of another textbook on the same subject, which probably gives me a slightly different perspective on the book compared to those of its intended readership.*

The book at hand is thin, less than 250 pages of text, and can easily be read within a week. I am very fond of the idea of presenting a difficult subject in a brief format. I think this must be very appealing to beginners who are often frightened by the heavy tomes typical of dermatopathology. Considering the brevity, the book includes quite a high number of figures, which are well taken, in focus, and of good color. All images are accompanied by meaningful legends. The schemas of patterns formed by infiltrates are nicely done and help especially those who are beginners in the field.

I applaud the organization of the content according to patterns and the emphasis that the authors put on a pattern-

based approach to diagnosis of skin biopsies. However, I do not particularly like the term “basic reaction pattern.” In my opinion, the term “basic pattern” suffices, and addition of the word “reaction” to it confuses the concept of pattern diagnosis. Patterns can be induced by reactive, as well as by neoplastic processes. Actually, the beauty of pattern diagnosis is that it can be applied to both. The best example for that is, of course, mycosis fungoides, which can mimic psoriasiform and lichenoid dermatitis, but there are others, like patch stage Kaposi’s disease, metastatic breast cancer, mastocytosis, B-cell lymphoma, etc., which can mimic interstitial or perivascular dermatitis respectively.

I have another conceptual difficulty with one of the “basic reaction patterns” defined by the authors, to wit, “palisading granulomatous dermatitis.” To me, a well-formed palisading granuloma is a nodule by pattern and falls in the category of a nodular dermatitis. If the palisading granulomas are large or arranged densely, they can present as a diffuse dermatitis. When the periphery of a palisading granuloma is biopsied, it can present as an interstitial dermatitis. I think a separate basic pattern of palisading granuloma is not necessary.

Every chapter on a “basic reaction pattern” includes a number of subchapters on individual diseases that commonly present with the pattern under discussion. The broad range of manifestations of some diseases (e.g., lupus erythematosus) is addressed by giving several examples. The difficulty of forcing a categorization of disease into a pattern-based approach to diagnosis becomes apparent, however, when lupus erythematosus is addressed in the chapter on “Interface dermatitis with perivascular infiltrate,” even though lupus erythematosus can present itself also as a lichenoid dermatitis or as a perivascular dermatitis without epidermal change. In chapters on those patterns, however, lupus erythematosus is not found with a separate paragraph. Interestingly, bullous lupus erythematosus is addressed separately in the chapter on “Subepidermal vesicular dermatitis,” and lupus panniculitis is addressed separately in the chapter on “Panniculitis.” This lack of logic in the organization of the content may cause some confusion in the mind of a beginner.

The paragraphs on individual inflammatory skin diseases cover “Clinical features,” “Microscopic features,” and “Differential diagnosis”—and tables accompany them on “Key microscopic features” and “Practical tips. . . The texts are brief and include the most essential clinical aspects of the condition and a more detailed description of histopathologic findings and differential diagnoses. While the tables on “key microscopic features” are largely redundant with the text, those on “practical tips” are interesting and must be helpful especially for beginners in the field. Readers here find some information on how to weigh diagnostic criteria in a certain clinical context.

I was surprised to see infectious diseases addressed in a chapter on their own. This separation based on etiology has nothing to do with a pattern-based approach to the diagnosis of skin specimens. The justification given by the authors that “many of the entities do not neatly fall into a reaction pattern” is not compelling to me. When you start looking at a biopsy, you don’t know whether it is an infection, and pattern diagnosis helps you to categorize the changes and to proceed stepwise to a point where you will also consider infectious processes that induce such changes. Moreover, as already mentioned, some non-infectious diseases do not neatly fall into one pattern but may form various patterns over time (e.g., lupus erythematosus). I was even more surprised to find subchapters on molluscum contagiosum and human papillomavirus infections in this book on inflammatory diseases of the skin. In my opinion, both are virus-induced hyperplasias and not infiltrates of inflammatory cells (in the classic definition of Virchowian pathology). I also cannot believe that any pathologist or resident would have serious difficulties with diagnosing those two common conditions (no need to demystify).

No separate chapter is devoted to alopecias. Lichen planopilaris is missing from the chapter on lichen planus; alopecia of lupus erythematosus is mentioned only in the clinical description in the chapter on lupus erythematosus; and folliculitis decalvans is not addressed. Admittedly, diagnosis of alopecias is a particularly difficult part of dermatopathology, but that is why I would have expected at least a paragraph discussing those difficulties instead of just neglecting it (need to demystify!)

Neoplastic simulators of inflammatory infiltrates are given short shrift in this text. Mycosis fungoides is addressed only as a differential diagnosis of “eczematous dermatitis” in the chapter on spongiotic dermatitis; but, practically, mycosis fungoides is also a common problem in differential diagnosis of psoriasiform and psoriasiform-lichenoid patterns. Even though the authors mention that, “A detailed discussion of mycosis fungoides is beyond the scope of this text,” the most frequent patterns formed by this common neoplastic simulator should have been mentioned. Strangely, the neoplastic conditions mastocytosis, lymphomatoid papulosis, and anaplastic large cell lymphoma are included in the chapter on “Perivascular dermatitis,” scattered between true inflammatory diseases like urticaria, perniosis, and arthropod bite reaction, and the authors do not comment on this somewhat bizarre organization of diseases. If those neoplasms deserved a paragraph of their own, why not include mycosis fungoides, which is a much more common diagnosis and differential diagnosis in the routine of dermatopathology?

Steven D. Billings confesses in the preface that early in his career he found dermatopathology “all too confusing” especially because “terminology was impenetrable.” A simi-

lar statement is found in the introduction, where the authors write, “inflammatory dermatopathology is especially vexing. . . . The terminology can border on the impenetrable.” That, of course, is true, and I was very curious to see in what way the authors would try to clarify terminology. There is, however, no glossary of terms relevant to the histopathology of inflammatory skin diseases, there is no reference to textbooks attempting to clarify terminology, and, for the most part, the authors employ conventional (and confusing) terminology of dermatopathology in this book without any critical comment.

As an example, I wonder what a pathology resident does with one of the introductory sentences of chapter 2 on “Spongiotic dermatitis”: “This chapter will focus on the group of entities encompassing the eczematous family of dermatitis . . .” Even after many years of practicing dermatology/dermatopathology I have no lucid definition of “eczema” nor of an “eczematous family of dermatitis.” Only four pages later, do the authors provide their definition of “eczematous dermatitis,, which is actually not a definition but a list of skin diseases that they deem to be “essentially histologically identical”: “atopic dermatitis, nummular dermatitis, contact dermatitis (both allergic and irritant contact dermatitis), dyshidrotic dermatitis (pompholyx), id reaction, and eczematous drug eruptions.” Apart from the fact that terms should always be defined *before* they are used, why should one continue using a term that is essentially meaningless?

I agree with the authors that phrasing a dermatopathology report is an art addressed almost never in dermatopathology textbooks, and I read with interest the sample reports provided by them. I think those may be helpful to colleagues who never had the chance to sign out specimens with more experienced dermatopathologists, but I also see some problematical aspects: First, I think, a sample report does not make sense without reference to an actual sample. The reports provided by the authors would be much more instructive if they had been accompanied by illustrations. Second, the high number of descriptive reports among those samples gives the wrong impression that specific diagnosis cannot be reached in many cases. In my opinion, a so-called “descriptive diagnosis” is not a diagnosis—it is just a description—and descriptive reports should be the exception, rather than the rule. A dermatopathologist should make every effort to decide on a diagnosis. That includes, of course, integration with clinical information and requires firm knowledge of the clinical spectrum of skin diseases. In this context, the authors are right to stress the importance of good communication with the clinician at various places in the book.

In sum, reading this book will surely help a pathologist/resident with little or no knowledge in dermatopathology to overcome their natural resistance towards inflammatory diseases of the skin. It will assist them to avoid bad mistakes and

to provide reports that are more helpful. Indeed, it can help the pathologist “survive.” In the long term, however, this is obviously not enough! If you really want to perform dermatopathology at a high level, you need to know more about the broad spectrum of manifestations, both clinically and histopathologically, of inflammatory skin diseases and their neoplastic simulators. Moreover, you will need to make up your own mind about a completely logical and systematic approach to the diagnosis of skin specimens, as well as about categorization and classification of inflammatory skin diseases.

*As an aside I would like to mention that even though I am coauthor of a competitive text (Ackerman AB, Böer A, Benin B, Gottlieb GJ. *Histologic Diagnosis of Inflammatory Skin Diseases. An Algorithmic Method Based on Pattern Analysis*. 3rd ed. New York City: Ardor Scribendi, Ltd., 2005. ISBN 1-893357-25-2), I do not have a commercial bias, because I never received any payments from the publisher, Ardor Scribendi, Ltd., for any work related to this book and Internet publication, nor did I or do I receive royalties from book sales.

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Drs. Billings and Cotton respond to the reviews

We are grateful for the comments provided by the reviewers of our textbook on inflammatory diseases of the skin. With regards to the specific comments, we appreciate the reviewers’ more constructive comments. Dr. Böer-Auer does highlight the problems with any classification system of biologic processes. There is always overlap and specific examples that do not neatly fit into defined categories. Our organization reflects an approach that has been an effective way for us to teach dermatopathology. It is by no means the only organization scheme that may be effective. We also agree that, whenever possible, a specific diagnosis should be rendered when dealing with inflammatory diseases, and we emphasize that viewpoint in the text. It has been our experience, however, as practicing dermatopathologists, that a descriptive diagnosis must sometimes be employed and that such reports can still be useful to our clinicians. Some of Dr. Böer-Auer’s comments seem to miss the spirit of our book. The book is primarily intended for the general surgical pathologist. For this reason, we did not include a chapter on alopecias, as surgical pathologists do not commonly encounter this group of disorders. We clearly state that this book is in no way a comprehensive treatise on the subject of inflammatory dermatopathology. When one is stranded in the wilderness, however, a survival guide may still come in handy. For those who wish

a more detailed discussion on the subject, Dr. Böer-Auer has graciously advertised the title and ISBN number of the book she co-authored for those who may want to purchase this publication.

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Comments by Mark A. Hurt, M.D., Book Review Editor

I thank Drs. Walsh and Böer-Auer for providing reviews for this book, and I thank Drs. Billings & Cotton for responding to the reviews. It is often difficult to accept criticism of one's work, but it is also useful to consider criticism, as to fear it is to think that the worst is true.

This is a small book addressing an approach to the diagnosis of inflammatory diseases of the skin. As the authors indicate in their *Preface*, their intention was to “demystify inflammatory dermatopathology” by providing a “survival guide” for surgical pathologists and residents (presumably residents training in anatomical pathology, but it is not stated explicitly). One of the principal purposes of the book is to provide examples of how to write a report for an inflammatory disease of the skin, as “writing the report is an art never discussed.”

In the 13 chapters that follow, the authors proceed to address inflammatory diseases of the skin from the epidermis, generally, to the subcutis. Chapter 10, “bullous dermatitis,” seems to be out of place, in my opinion; I would have expected to see it inserted after interface dermatitis and before perivascular dermatitis. The last two chapters break with the algorithmic approach and address specific problems of infections (chapter 12) and invisible dermatoses and inflammatory mimics of neoplastic diseases (chapter 13).

The chapters follow the format of introducing the pattern, followed by a number of specific conditions. The specific conditions contain bullet points of “practical tips,” which address the essentials of the condition being discussed; I liken them to “pearls.” Additionally, each chapter begins with a schematic, or cartoon, of the pattern addressed. Although the photographs are small, they are quality photographs—clear and crisp.

The conditions addressed in each chapter are archetypes; there is no intention here for a comprehensive treatment of every disease; the reader will not encounter the entire conceptual spectrum of these conditions, and it is an unrealistic expectation. This is a benefit, oddly enough, given the focus

of the text. There are other comprehensive texts; *this* text offers a basic conceptual framework, and its purpose is to convey *that* approach—not to inundate the reader with too many concretes. This is a practical consideration, because it requires some years to encounter the entire spectrum of inflammatory diseases or the spectrum of presentations of even a *single* inflammatory disease (Mucha-Habermann disease comes to mind immediately); one must begin with archetypes if there is to be any chance of engaging the reader to delve further.

I do think that lymphomatoid papulosis and anaplastic large T-cell lymphoma belong in the “mimics” section instead of having a place in perivascular dermatitis, as these are neoplastic conditions, not inflammatory diseases. It is appropriate to list these neoplasms in the differential diagnosis of inflammatory diseases, which is a common problem in the differential diagnosis.

These criticisms aside, I very much enjoyed reading this book and thinking about the authors' approach to the problems encountered by inflammatory diseases of the skin. The book also lends itself to a framework that its students can write notes in the pages and discover for themselves the variations of pattern, introduced by the authors, of the basic diseases involved here.

When confronted with a task, say, putting a lecture together on a complex topic, it always helps to have a basic framework from which to begin thinking about the entire spectrum of problems. This book provides some of that framework. I believe it is a necessary read for every pathology (and dermatology) resident. I agree also with the authors that surgical pathologists will benefit from reading this book and using it at the bench. As the authors state in their *Preface*, it can be read in a weekend (and that is no joke!) I wish I had something comparable to this book when I was a resident in pathology, some 30 years ago! It would have been enormously helpful to me then.

Finally, I appreciate the authors' efforts to include examples from pathology reports. I agree with them that this is a neglected aspect of the practice of dermatopathology. When I first began practicing pathology in the 1980's, comments were the bastard child of a report. “Be definitive” was the command of my teachers; after all, *everything* is something specific. While this is true, one's *knowledge* is not always specific, and the “comments” section of a report offers the opportunity to explain why a diagnosis is not certain in every case—in fact, no diagnosis is *possible* in every case. My comments sections used to look similar to those of the authors; however, in recent years, I have moved away from providing histopathological descriptions in the comments sections. As a rule, I restrict all histopathological findings to the “microscopic” section of the report, the diagnosis is located on the top line, and the comment is just below the

diagnosis line. In my comments, I offer interpretations, often a differential diagnosis, as well as *why* the differential is, in fact, the differential. There is also another crucial aspect to the comments section; it offers an opportunity to address the clinical differential diagnosis and accept or refute each one by one.

In short, and in sum, I think this is an important work because of its brevity and focus, and I recommend it to anyone with an interest in inflammatory diseases of the skin.

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