Basic Skills in Interpreting Laboratory Data, 3rd edition


Shortly after I began to review this text for CJHP, I gave my copy of the second edition to another practitioner, assuming that the newer edition would quickly take the place of the older one. On further reading, however, I became acutely nostalgic for (what I recall was) a straightforward and concise guide to interpretation of laboratory and selected other diagnostic and reference tests.

Certainly the new text is more comprehensive than its predecessor. Many chapters suggest articles for further reading, and the references are extensive. Much of the text has obviously been written by practitioners familiar with evidence-based medicine, and they clearly outline controversies in the use and interpretation of specific tests. An effort is also made to illustrate the relevance of various tests using case presentations, although there are instances — especially in the earlier chapters — where the cases presented are unrealistic or implausible (e.g., prescription of depot testosterone for a patient being treated with leuprolide or a pharmacist neglecting to disclose legitimate use of Tylenol #3 before workplace drug testing).

In general, efforts to update the text appear to have been directed at adding more detailed and current examples, but this approach often obscures relevant information. For example, the chapter on rheumatic diseases defines each of the markers and outlines its usefulness in diagnosing rheumatoid arthritis, but does not indicate any further relevance of these markers to pharmacy practice (e.g., to monitor disease progression or response to treatment). In the chapter on cardiac tests, almost 9 pages are devoted to discussion of the biochemical markers of cardiac insult (and, by default, the range of acute coronary syndromes), which is followed by a basic review of electrocardiography. This unusual order of presentation — with the complex material preceding the “background information” — occurs periodically throughout this text and weakens its usefulness as a self-study guide. However, this is unlikely to be noticed if the book is used for “quick reference”.

In fact, many changes have been made to enhance the utility of this text as a quick reference, most notably the “Quickview” summaries for specific tests at the end of relevant chapters. However, the inclusion of the Quickviews is inconsistent: as an example, none are provided for hematological tests, for which reference ranges are well established, but several are provided for lipid parameters, which are still subject to ongoing review. In many instances, it would have been more helpful for practitioners if specific tables or figures had been included in the chapter text (although students cramming for exams will probably prefer the Quickviews). The format of these summaries is also awkward, with right-justified titles (such that entries printed on even-numbered pages are difficult to identify, with the titles physically located in the gutter of the book) and nonalphabetical listing of test names. Formatting appears to be an issue for other elements of this book, too; for example, table titles are presented below the tables, where one would normally expect to find footnotes.

In contrast to the previous edition, which strived primarily to be a reference guide for new or returning “general practice” pharmacists, this text appears to be trying to woo pharmacy students in the United States. The US perspective is only occasionally disruptive, with SI (Système international) units omitted from some important tables (e.g., glucose tolerance testing), listing of specific brand names in some cases, and an awkward chapter on substance abuse and poisoning. Some sections of the book are written at a level far below what most entry-level pharmacists require, while others are dizzying in their detail. Professors looking for exam material will find a gold mine in this text.

When I was a resident and junior practitioner, I greatly appreciated the previous editions of this text because they helped to bridge that huge gap between the detailed science of laboratory testing and the clinical art of interpreting test results. Like its predecessors, this edition is written in a clear, authoritative manner, and the expertise of its authors is clearly evident throughout. For a basic introduction as to how and why lab tests are performed, this text is a perfect fit. Preceptors working in specialty practice may also find certain chapters of this text useful for orientation of their students, to be supplemented by their clinical advice and experience. This text would be a solid addition to the drug information library, but practitioners who are searching for a little more context — perhaps to prepare for an interdisciplinary discussion about a patient — would be better off doing their own literature searches.

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Books Received


