Differential diagnosis by Laboratory Medicine

by Vincent Marks, Thomas Cantor, Dusan Mesko, Rudolph Pullmann, & Gabriela Nosalova
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Reviewer: David L. Williams

Although the sub-title to this textbook is “A quick reference for Physicians”, it will also prove to be useful to those who work in medical laboratories.

The first and major section of the book consists of an alphabetical list of substances analysed in clinical biochemistry laboratories. Most of the substances are treated fully including their production, function and test purpose; the significance of raised or lowered concentrations or activities are also listed along with each substance.

The second section is entitled “Biochemical/laboratory findings in clinical units and conditions”. A large number of clinical conditions are presented alphabetically and the rise or fall of the biochemical parameters are listed in detail for each condition.

The third section deals with the consequences on test results of interfering medicaments. These interfering medicaments are listed alphabetically and the rise or fall in the levels of parameters caused by each interferent are detailed.

Appendices list the reference ranges for each measured substance, their basic pharmacokinetic parameters and the conversion factors necessary to convert from SI units to ‘conventional’ units or vice versa.

In addition there is an introductory section that covers the important features of the pre-examination, examination and post-examination phases. There is also a useful list of abbreviations and a list of the effects of incorrect sampling or of clinical conditions (such as recent blood transfusion) on the integrity of the sample.

This will be a very useful book for those who work in clinical chemistry laboratories. The one criticism is that the title indicates that the book deals with all of laboratory medicine; this is not the case as it is almost entirely limited to clinical chemistry tests. Further volumes covering haematology and microbiology would be very helpful for those who specialise in these areas.