

BIOCHEMICAL FINDINGS IN THE DIFFERENTIAL DIAGNOSIS OF INTERNAL DISEASES

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Preface

Clinical chemistry plays a prominent part in modern diagnosis. While detailed knowledge of methods is usually the province of the clinical chemist, nevertheless every doctor, especially clinicians, ought to know the significance of chemical findings in both diagnosis and prognosis.

There is now such a mass of important data that even the expert cannot be expected to remember it all. This book is therefore intended to classify the important biochemical findings in internal diseases with special emphasis on their value in diagnosis. For easy reference the most important data are given in tables in the second part of the book. When necessary, the chemical or pathological principles involved are discussed briefly.

The entire book is the result of real cooperation between the collaborators who have shared in its production by giving their specialised knowledge and advice. The editors wish to take this opportunity of thanking the collaborators and the publishers for their help and patience.

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Introduction

The modern clinic is, and always will be, based on medical observation and examination and on thorough history taking. There is no doubt that laboratory investigations are indispensable for precise diagnosis and following the course of disease. Their importance and justification lie in extending clinical findings and hence medical judgement, making it possible to arrive at a precise diagnosis and to evaluate and control therapy. Indiscriminate use of the laboratory has been criticised on the grounds of high cost and inconvenience to the patient and it is therefore all the more essential that the clinician should be familiar with available laboratory tests, their reliability and specificity. The optimum service can be obtained from the laboratory only if it is used wisely and not overwhelmed with unnecessary routine work. This book has been written to help the clinician make proper use of the laboratory.

It is confined to biochemical techniques and does not discuss other well established physical methods such as cytology; limitations on its scope have had to be somewhat arbitrary. Thus methods of evaluating circulation and respiration with relevant blood gas analyses are not discussed, but determination of the basal metabolic rate is included. Other restrictions were necessary and intentional, *e.g.* long-established methods of gastric and intestinal disease diagnosis are omitted. From a wide field we have included the methods of investigation and biochemical data which we have found most useful. This may have resulted in a very subjective selection, but it demonstrates the individuality of a clinic, which in itself may be valuable, and the uniform presentation achieved may be even more important. Better coordination has been possible than with most books by a number of authors for the subject has been covered by people working at one clinic, with collaboration of a few colleagues from neighbouring clinics and institutes with whom they are in close touch. Each contributor has checked his own work throughout and this was followed by joint discussion, so we hope that this book is as uniform in presentation as a first edition can be. For clarity and ease of handling, text and tables are separated. We have not attempted to describe individual methods which can be found elsewhere but have tried rather to emphasise the importance of biochemistry at the bed-side and its pathological basis.

The bond between laboratory diagnosis and pathology is not new, but was defined as "Clinical Chemistry" by Lichtwitz some 50 years ago in his famous book. Meanwhile broad, fundamental changes and developments have taken place in diagnosis and the clinical methods it employs. Specialisation has proceeded so far that it is difficult for the individual to keep pace with advances. This book is intended to be an authoritative reference book and the material it contains has been selected with practical considerations in mind. Clearly arranged tables are presented in a separate part