CAMBRIDGE

Cambridge University Press
978-0-521-54226-5 - Clinical Physiology: An Examination Primer
Ashis Banerjee
Frontmatter
More information

Clinical Physiology

This is an admirably concise and clear guide to fundamental concepts in physiology relevant to clinical practice. It covers all the body systems in an accessible style of presentation. Bulleted checklists and boxed information provide an easy overview and summary of the essentials. By concentrating on the core knowledge of physiology, it will serve as a useful revision aid for all doctors striving to achieve postgraduate qualification, and for anyone needing to refresh their knowledge base in the key elements of clinical physiology.

The author's own experience as an examiner at all levels has been distilled here for the benefit of postgraduate trainees and medical and nursing students.

Dr Ashis Banerjee is Consultant in Emergency Medicine and serves as Examiner for those undertaking their MB, BS, MRCS and MFAEM examinations.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-54226-5 - Clinical Physiology: An Examination Primer
Ashis Banerjee
Frontmatter
More information

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-54226-5 - Clinical Physiology: An Examination Primer
Ashis Banerjee
Frontmatter
More information

Clinical Physiology

An Examination Primer

Ashis Banerjee
Consultant in Emergency Medicine, Lewisham University Hospital

CAMBRIDGE
UNIVERSITY PRESS

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-54226-5 - Clinical Physiology: An Examination Primer
Ashis Banerjee
Frontmatter
More information

CAMBRIDGE
UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org
Information on this title: www.cambridge.org/9780521542265

© A. Banerjee 2005

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2005

A catalogue record for this publication is available from the British Library

ISBN 978-0-521-54226-5 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication, and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

Every effort has been made in preparing this publication to provide accurate and up-todate information that is in accord with accepted standards and practice at the time of publication. Nevertheless, the authors, editors and publisher can make no warranties that the information contained herein is totally free from error, not least because clinical standards are constantly changing through research and regulation. The authors, editors and publisher therefore disclaim all liability for direct or consequential damages resulting from the use of material contained in this publication. Readers are strongly advised to pay careful attention to information provided by the manufacturer of any drugs or equipment that they plan to use.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-54226-5 - Clinical Physiology: An Examination Primer
Ashis Banerjee
Frontmatter
More information

Contents

Preface page vii

1 Cell physiology 1
2 Water and electrolyte balance 19
3 Acid–base balance 31
4 Renal physiology 44
5 Temperature regulation 66
6 Cardiovascular system 71
7 Respiratory system 115
8 Blood 140
9 Neurophysiology 177
10 Endocrine physiology 258
11 Gastrointestinal physiology 316

Index 349

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-54226-5 - Clinical Physiology: An Examination Primer
Ashis Banerjee
Frontmatter
More information

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-0-521-54226-5 - Clinical Physiology: An Examination Primer
Ashis Banerjee
Frontmatter
More information

Preface

The teaching of physiology at the undergraduate level often fails to provide its students with any enthusiasm or lasting zeal for the subject. This is regrettable because a good knowledge of normal human physiology is critically important in understanding the effects of organ dysfunction secondary to disease. Adequate treatment of the multiple insults to the body in the seriously ill patient requires a good understanding of the underlying pathophysiological mechanisms. Undoubtedly, the gradual demise of academic physiology in the United Kingdom has contributed to the current state of affairs. This book explains the basic concepts of physiology in a succinct and didactic fashion. Its aim is to aid the medical student and the junior doctor in obtaining a good understanding of the homeostatic mechanisms of the human body so that the effects of dysfunction of these mechanisms can be better understood. It is also designed to aid with the basic science component of the various royal college examinations that are required to be passed prior to entering specialist training in the United Kingdom.

Ashis Banerjee

© in this web service Cambridge University Press www.cambridge.org