SIXTH EDITION

Paediatric Clinical Examination

MADE EASY







Any screen. Any time. Anywhere.

Activate the eBook version of this title at no additional charge.



Student Consult eBooks give you the power to browse and find content, view enhanced images, share notes and highlights-both online and offline.

Unlock your eBook today.

- Visit studentconsult.inkling.com/redeem
- Scratch off your code
- Type code into "Enter Code" box
- 4 Click "Redeem"
- 5 Log in or Sign up
- 6 Go to "My Library"

It's that easy!

Scan this QR code to redeem your eBook through your mobile device:



Place Peel Off Sticker Here

For technical assistance: email studentconsult.help@elsevier.com call 1-800-401-9962 (inside the US) ELSEVIER call +1-314-447-8200 (outside the US)

Use of the current edition of the electronic version of this book (eBook) is subject to the terms of the nontransferable, limited license granted on studentconsult.inkling.com. Access to the eBook is limited to the first individual who redeems the PIN, located on the inside cover of this book, at studentconsult.inkling.com and may not be transferred to another party by resale, lending, or other means.

Paediatric Clinical Examination Made Easy To our children: Kieron, Daniel, Aisling, Meagan, Michael, Slaney, Eoin, Cliona, Helene and Aisling and to our respective wives, Margaret and Helene

For Elsevier:

Content Strategist: Pauline Graham

Content Development Specialist: Humayra Rahman Khan

Project Manager: Andrew Riley Designer: Margaret Reid

Marketing Manager: Deborah Watkins

Paediatric Clinical Examination Made Easy

Denis Gill MB BSc DCH FRCPI FRCPCH Professor of Paediatrics, Royal College of Surgeons in Ireland and The Children's University Hospital, Dublin, Ireland

Niall O'Brien MB DCH FRCPI

Consultant Paediatrician, National Maternity Hospital and The Children's University Hospital, Dublin, Ireland

Illustrated by Des Hickey

SIXTH EDITION

ELSEVIER

Search full text online at StudentConsult.Com EDINBURGH LONDON NEW YORK PHILADELPHIA ST LOUIS SYDNEY TORONTO 2018

ELSEVIER

- © Longman Group UK Limited 1993
- © Pearson Professional Limited 1996
- © Harcourt Health Sciences Limited 1998
- © Elsevier Science Limited 2002
- © 2007 Elsevier Limited. All rights reserved
- © 2018 Elsevier Limited. All rights reserved

The right of Denis Gill and Niall O'Brien to be identified as authors of this work has been asserted by them in accordance with the Copyright, Designs and Patents Act 1988.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the Publishers. Permissions may be sought directly from Elsevier's Health Sciences Rights Department, 1600 John F. Kennedy Boulevard, Suite 1800, Philadelphia, PA 19103-2899, USA: phone: (+1) 215 239 3804; fax: (+1) 215 239 3805; or, e-mail: healthpermissions@elsevier.com. You may also complete your request on-line via the Elsevier homepage (http://www.elsevier.com), by selecting 'Support and contact' and then 'Copyright and Permission'.

First edition 1993 Second edition 1996 Third edition 1998 Fourth edition 2002 Fifth edition 2007 Sixth edition 2018

ISBN: 978-0-7020-7288-8

International Edition ISBN: 978-0-7020-7289-5

Note

Neither the Publisher nor the Authors assume any responsibility for any loss or injury and/or damage to persons or property arising out of or related to any use of the material contained in this book. It is the responsibility of the treating practitioner, relying on independent expertise and knowledge of the patient, to determine the best treatment and method of application for the patient.



your source for books, journals and multimedia in the health sciences

www.elsevierhealth.com

Working together to grow libraries in developing countries

www.elsevier.com | www.bookaid.org | www.sabre.org

ELSEVIER

BOOK AII

Sabre Foundation

The publisher's policy is to use paper manufactured from sustainable forests

Printed in China

Preface to Sixth Edition

One of the pleasures of writing the preface for a book on clinical examination is that the fundamentals don't change. A thorough history, a complete physical examination and a logical deduction and conclusion from the findings remain the basis of clinical interaction. In this edition, we have responded to critiques by adding extra diagrams, making alterations here and there, and improving the layout. The good doctor is the good listener, good examiner, good interpreter and good problem-solver. We hope that clinical examination will not be supplanted by CTs, MRIs, PETs, and increasingly sophisticated scanning techniques. Scanning techniques have improved dramatically in the past 20 years for those based in secondary and tertiary care hospitals. This has been especially true of ultrasonic examinations of the acute abdomen in infants and children, in cardiac echographs, and in MRI examination of the newborn and infant brain, to cite but a few examples. The primary care paediatrician working in remote or isolated practice will still need to rely on his/her diagnostic wit and clinical skills. We trust that clinical findings will continue to direct appropriate investigations. Listening and laying on of hands remain the cornerstones of clinical contact and contract. Good children's clinicians do more talking and thinking, and hopefully less blood testing. Children will like them for that.

Denis Gill Niall O'Brien

Acknowledgements

We could not have delivered the text without the tireless typing of Norma McEneaney, the photographic shots of Thomas Nolan, and the lively illustrations of Des Hickey; to all of them we are extremely grateful. We thank Professor Alan Browne for his view of the Hippocratic tradition.

D.G.G. N.O'B

Internet sites

There is virtually limitless information available on the internet. Students will learn of and access their favourite sites. The list below is limited and selective, but hopefully contains appropriate starting points.

- http://journals.bmj.com *BMJ* (British Medical Journal)
- www.medicalstudent.com
- www.aap.org American Academy of Pediatrics
- www.omim.org Online Mendelian Inheritance in Man
- http://www.medic8.com/MedicalDictionary.htm
- · www.rarediseases.org
- http://www.ncbi.nim.nih.gov/pubmed PubMed
- www.rcpch.ac.uk Royal College of Paediatrics and Child Health
- www.cdc.gov Centers for Disease Control and Prevention (CDC)
- http://www.who.int/en/ World Health Organization (WHO)
- http://adc.bmj.com/ Archives of Disease in Childhood
- http://student.bmj.com/student/student-bmj.html Student BMJ

This page intentionally left blank

Contents

Preface v

Acknowledgements vi

Internet sites vii

1. Introduction 1

Children and doctors 3
'Veterinary' paediatrics 5
Aims and objectives in paediatrics 6
The seven ages of children 7
Children in hospital 8
Three pillars of diagnosis 10

2. History taking 13

Listening to mothers 13 Cue words 18 A sample history 19 Let the children speak 25 Talking to parents 27 Breaking bad news to parents 30

3. Approaching children 33

The approach code 33
Things not to do 39
Point to the part which
hurts 41
Putting it together 44
I don't know 47
Diagnostic logic 47
Syndrome recognition 48

4. Examination at different ages 51

Newborn 51 Six-week examination 74 The acutely ill infant 79 The terrified toddler 83

5. Systems examination 87

The chest 87
The cardiovascular system 104
The abdomen 116
Examining the glands 131
Clinical evaluation of the immune system 133
Ear, nose, mouth and throat 133
Skin, hair and nails 141

CONTENTS

Neurological examination 150 Musculo-skeletal system 170 The eyes 187 Surgery 196

6. A measure of progress 199

7. Hydration and nutrition 209

Detecting and determining dehydration 209 Nutrition 214

8. Developmental assessment 219

3 months 220 4–5 months 221 6–8 months 221 9–10 months 223 12 months 225

18 months 226

3 years 228 4 years 228

9. Examining excreta 229

The stool medical inspection 229
Cast your eye on the urine 231

10. Using your senses 235 A cacophony of cries 235 A sense of diagnosis 238 The diagnostic touch 239 The last word 239

11. Paediatric tips and topics 241

Normal findings 242 Tools of the trade 242 Tricks of the trade 243 Biological warning signs 244 Clinical curios 245 Rules of thumb 246 Maternal myths 247 Acrimonious acronyms 247 A-Z of eponyms 248 Alarm signals: ? nonaccidental injuries 252 Memorable mnemonics 253 Genetic graphics 256 'Growing out' of disorders/ illnesses 256 The child is father of the man' 258 Tips for the paediatric examination 259 Essential clinical skills 261 Things to be seen and understood by undergraduate students 265 Cliniquiz 267

Children's
'wisdomisms' 268
Paediatric synonyms and
slang 269
Children are different 270
Physiological facts: did you
know that . . . 270
At what age can a
child . . . 272

Some Latin translations 274 A question of fives 274 Multiple choice questions (MCQs) – best of five 275 Multiple choice questions (MCQs) – true/false 280

Index 285