

Cambridge University Press

978-1-107-64458-8 - Postgraduate Paediatric Orthopaedics: The Candidate's Guide to the FRCS (Tr & Orth) Examination

Edited by Sattar Alshryda, Stan Jones and Paul A. Banaszkiwicz

Frontmatter

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The Candidate's Guide to the FRCS (Tr & Orth) Examination

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Contents

List of contributors vi

Foreword by Colin E. Bruce vii

Preface ix

Acknowledgements x

Interactive website xi

List of abbreviations xii

Section 1 – General guidance

- 1 **Introduction and general preparation** 1
Paul A. Banaszkiwicz
- 2 **History and examination of the paediatric patient** 5
Stan Jones and Sattar Alshryda

Section 2 – Core structured topics

- 3 **The hip** 17
Sattar Alshryda and Paul A. Banaszkiwicz
 - 3.1 **Slipped upper femoral epiphysis (SUFE)** 17
 - 3.2 **Perthes disease** 26
 - 3.3 **Developmental dysplasia of the hip** 34
 - 3.4 **Miscellaneous** 53
- 4 **The knee** 62
Sattar Alshryda and Fazal Ali
- 5 **The foot and ankle** 86
Anthony Cooper and Stan Jones
- 6 **The spine** 104
Ashley A. Cole and Lee M. Breakwell
- 7 **The shoulder** 124
Om Lahoti and Matt Nixon
- 8 **The elbow** 133
Om Lahoti and Matt Nixon
- 9 **Congenital hand deformities** 146
Dean E. Boyce and Jeremy Yarrow

-
- 10 **Neuromuscular diseases** 165
Simon L. Barker
 - 11 **Musculoskeletal infections** 180
Richard O.E. Gardner and Simon P. Kelley
 - 12 **Musculoskeletal tumours** 186
Richard O.E. Gardner, Gino R. Somers and Sevan Hopyan
 - 13 **Skeletal dysplasia** 207
Anish P. Sanghrajka and James A. Fernandes
 - 14 **Metabolic bone disease** 221
Mubashshar Ahmad and Gavin De Kiewiet
 - 15 **Physis and leg length discrepancy** 231
Tim Nunn and Stan Jones
 - 16 **Deformity corrections** 240
Farhan Ali and Alwyn Abraham
 - 17 **Miscellaneous paediatric conditions** 249
Kathryn Price and Akinwanda Adedapo

Section 3 – Exam-related material

- 18 **MCQs and EMQs** 263
Paul A. Banaszkiwicz and Manish Changulani
- 19 **Viva and clinical practice** 278
Mohamed O. Kenaway and Paul A. Banaszkiwicz

Index 290

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Frontmatter

[More information](#)

Foreword

Since 1998, I have convened an annual core curriculum lecture course in paediatric orthopaedics at Alder Hey Children's Hospital. Over the years, we have frequently been asked to recommend books that succinctly cover all of the necessary information and I now believe that we have found such a book in *Postgraduate Paediatric Orthopaedics: The Candidate's Guide to the FRCS (Tr & Orth) Examination*. As the title suggests, the text is targeted toward trainees sitting the FRCS (Tr & Orth) examination but the book would also be useful for those who seek to enhance or maintain their paediatric orthopaedic knowledge base, including practicing orthopaedic

surgeons, GPs, paediatricians and specialist physiotherapists. The text is much more than lecture notes and covers all of the major subjects with sufficient information to keep the reader interested, while still delivering the required facts to an examination candidate as quickly as possible. I congratulate the editors and the authors for producing such a useful text.

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Frontmatter

[More information](#)

Preface

Why another exam-related FRCS (Tr & Orth) book? Don't we cover paediatrics in the chapters of the other *Postgraduate Orthopaedics* books?

We always felt the need for a more definitive guide to the paediatric component of the FRCS exam.

We were never entirely happy that the FRCS (Tr & Orth) paediatric syllabus was particularly well covered or developed in a number of orthopaedic books. Most lacked the specific subject focus that candidates needed to pass the FRCS (Tr & Orth) exam.

General orthopaedic books tended to scratch the surface of a difficult area of orthopaedics that needs to be learnt well for the exam. Specialized books on paediatrics meant you could lose all focus of the subject's relevance and end up not extracting the relevant or specific detail required to pass the exam. Moreover, you could find yourself spending a lot of unnecessary time and effort drowning in these specialized textbooks and not have enough time left to read the basic science, trauma or hands sections.

Our aim with this book is to make it all-encompassing, so that it covers everything you need to know to pass the FRCS (Tr & Orth) section of the exam without having to cross-reference from other larger textbooks. A tall order but one, we hope, that we manage to fulfil.

We were careful not to make the book too detailed, so it ends up being like a subspecialty book in paediatrics. At the same time, we didn't want it to become too flimsy, such that you felt you were missing something and you repeatedly needed to go to the larger specialized textbooks of paediatric orthopaedics.

We decided to include in detail all components of the exam; therefore, we have added multiple-choice and extended matching questions. There really should not be an artificial separation between Parts I and II of the exam.

As with all the books in the *Postgraduate Orthopaedics* series, we make no claim for the originality of the material contained in the text. This material is widely available in the larger orthopaedic community. We have simply distilled and focused this knowledge into something that will hopefully get you through the exam.

We hope you find this book useful in preparing for the exam and wish you every success. We hope that in some small (or large) way the book will make the difference between you passing and failing the exam.

Sattar Alshryda
Stan Jones and
Paul A. Banaszkiwicz

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Interactive website

www.postgraduateorthopaedics.com

This website accompanies the textbook series *Postgraduate Orthopaedics*, which includes:

- *Postgraduate Orthopaedics: The Candidate's Guide to the FRCS (Tr & Orth) Examination*, 2nd edition,
- *Postgraduate Orthopaedics: Viva Guide for the FRCS (Tr & Orth) Examination*,
- *Postgraduate Paediatric Orthopaedics: The Candidate's Guide to the FRCS (Tr & Orth) Examination*.

The aim is to provide additional information and resources, so as to maximize the learning potential of each book.

Additional areas of the website provide supplementary orthopaedic material, updates and web links. *Meet the Editorial Team* provides a profile of authors who were involved in writing the books. Details of forthcoming courses are provided, as are details of the next exam dates.

There is a link to additional orthopaedic websites that are particularly exam-focused.

It is very important that our readers give us feedback. Please email us if you have found any errors in the text that we can correct. In addition, if we haven't included an area of orthopaedics that you feel we should cover please let us know. Likewise, any constructive suggestions for improvement would be most welcome.

Abbreviations

AAI atlantoaxial instability	CSL central sacral line
ABC aneurysmal bone cysts	CT computed tomography
ACL anterior cruciate ligament	CTEV congenital talipes equinovarus (club foot)
ADI anterior atlantodens index	CV coxa vara
ADM abductor digiti minimi	CVS cardiovascular system
AER apical epidermal ridge	DCV developmental coxa vara
AI acetabular index	DDH developmental dysplasia of the hip
AIIS anterior inferior iliac spine	DEXA dual-energy X-ray absorptiometry
AP anteroposterior	EDF elongation, derotation and flexion
ASIS anterior superior iliac spine	EEC ectrodactyly–ectodermal dysplasia–clefting
ATD articulothrochanteric distance	EF external fixation
AVN avascular necrosis (see also ON)	EMA epiphyseal–metaphyseal angle
BMP bone morphogenic protein	EMQ extended matching question
CAPTA Child Abuse Prevention and Treatment Act	ESR erythrocyte sedimentation rate
CAVE cavus, abduction, varus and equinus	FAV femoral anteversion
CCV congenital coxa vara	FDS flexor digitorum superficialis
CEA centre edge angle	FFD focal fibrocartilaginous dysplasia
CMCJ carpometacarpal joint	FIN flexible intramedullary nailing
CML classical metaphyseal lesions	FPA foot progression angle
CMT Charcot–Marie–Tooth disease	g gram
CNS central nervous system	GHJ glenohumeral joint
CORA centre of rotation of angulation	GMFCS Gross Motor Functional Classification System
CRP C-reactive protein	GP general practitioner

List of abbreviations

HEA Hilgenreiner epiphyseal angle	NSAID non-steroidal anti-inflammatory drug
IGHL inferior glenohumeral ligament	OA osteoarthritis
IJO idiopathic juvenile osteoporosis	OBPI obstetric brachial plexus birth injury
IU International Unit	OI osteogenesis imperfecta
JLCA joint line convergence angle	ON osteonecrosis (see also AVN)
kg kilogram	P <i>P</i> value
LCL lateral collateral ligament	PCL posterior cruciate ligament
LCPD Legg–Calvé–Perthes disease	PFDD proximal femoral focal deficiency
LLD leg length discrepancy	PH Pavlik harness
m metre	PHHA posterior humeral head articulation
MACS Manual Ability Classification System	PHV peak height velocity
MBD metabolic bone diseases	PIPJ proximal interphalangeal joint
MCL medial collateral ligament	PIS pinning <i>in situ</i>
MCPJ metacarpophalangeal joint	PMNST peripheral malignant nerve sheath tumour
MCQ multiple-choice question	POP plaster-of-Paris
MDA metaphyseal–diaphyseal angle	PPA patellar progression angle
mLDFA mechanical lateral distal femoral angle	PSA posterior slip angle
mLDTA mechanical lateral distal tibial angle	PSACH pseudoachondroplasia
mLPFA mechanical lateral proximal femoral angle	PTH parathyroid hormone
MED multiple epiphyseal dysplasia	RANK receptor activator of nuclear factor κ B
MGHL middle glenohumeral ligament	RCT randomized controlled trial
MPFL medial patella–femoral ligament	RMI Reimer's migration index
MPTA medial proximal tibial angle	ROM range of motion
MRI magnetic resonance imaging	RVAD rib–vertebra angle difference
MRSA methicillin-resistant <i>Staphylococcus aureus</i>	SAC space available to the cord
MTPJ metatarsophalangeal joint	SAPHO synovitis, acne, pustulosis, hyperostosis and osteitis
NAI non-accidental injury	SD standard deviation
NF neurofibromatosis	SED spondyloepiphyseal dysplasia
NICE National Institute for Health and Care Excellence	SPNBF subperiosteal new bone formation
NSA neck–shaft angle	SUFE slipped upper femoral epiphysis

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TAR thrombocytopaenia absent radii	vs versus
TFA tibiofemoral angle	VMO vastus medialis obliquus
TMA transmalleolar thigh angle; tarsometatarsal angle	WCC white cell count
UCL ulnar collateral ligament	ZPA zone of polarizing activity
VACTERL vertebral defects, anal atresia, cardiac defects, tracheo- esophageal fistula, renal anomalies and limb abnormalities	°C degree Celsius