Calcium and Bone Disorders in Children and Adolescents

Volume Editors

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89 figures, 13 in colour, and 25 tables, 2009
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The understanding of the biology and pathophysiology of the human skeleton has progressed at a remarkably fast pace in the past 35 years. Investigation and management of bone diseases were only chapters in textbooks on endocrinology or nephrology. Not anymore. Based on innovative diagnostic technologies, the development of new therapeutic modes, and the progress in medical genetics, the field of bone disease has established itself as a stand-alone specialty. As a consequence, a large number of books, thick and thin, have been and continue to be published on various aspects of skeletal diseases. In some, there are chapters on paediatric bone diseases, but it is only of late that entire books devoted to the study of the growing skeleton and its abnormalities have emerged, based on the impressive growth of knowledge in all aspects (cellular, organic, hormonal, structural) of bone metabolism and the diseases that interfere with the development, growth, remodelling and mineralisation of bone.

The precursor opus was published in 1974 by Maroteaux [1]. It is a most extraordinary collection of radiographs, but with a timid approach at basic mechanisms. In 1980, there was also the book honouring Helen and Harold Harrison’s contribution to the understanding of paediatric bone diseases. It focused on biochemistry and clinical studies [2]. Then in 2003, an elaborate treatise was published as an attempt to organise the sum of current knowledge on paediatric bone diseases [3]. The editors of the present work have pursued the same goal in a concise and practical manner. They have recruited experts on various aspects of the biology of bone and the diseases affecting its structure and function. The field is well covered, but the true originality of the book lies within its last section where a series of case histories is presented. No doubt, the readers will appreciate this real-life approach to the problems discussed and, hopefully, connect them with their own experience.

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References

The idea for this book arose as a result of a number of initiatives. Several paediatricians in the UK with a clinical and research interest in calcium and bone disorders in children started to establish dedicated Metabolic Bone Disease clinics about 10 or more years ago. These clinics have attracted a wide variety of different conditions. Many of these are unusual but not really of sufficient rarity to warrant separate case reports. Others have already been published. There is, however, no publication that specifically brings together case histories related to bone and calcium disorders placed in the context of the background physiology and pathology, so, consequently, the idea arose of providing one.

As a consequence of the rarity of some of the conditions we were seeing, a group of us started to meet twice a year to discuss challenging cases and share knowledge and expertise. Out of these initial meetings developed the British Paediatric and Adolescent Bone Group (BPABG), which is now affiliated to the Royal College of Paediatrics and Child Health as a speciality group with our own scientific session at the annual conference. The aim of this group is to promote knowledge and understanding of paediatric bone disease. As an additional development to fulfil this objective it has, for the past 3 years, run an annual postgraduate teaching course for senior trainees and consultants who are interested in learning more about the subject. An important aspect of these courses is that the delegates have been asked to bring case histories for presentation and discussion. Many of the cases described in the final chapter have been presented at these courses. Many of the chapters in this book are based on the lectures given at them and all of the founder members of BPABG have contributed. Additional contributions have come from other members of the BPABG together with some international authors.
We are grateful to Karger for inviting us to edit this book, which is published as part of their Endocrine Development series under the overall editorship of Professor Primus Mullis. We are grateful to all of the authors for sending us their manuscripts in a timely manner. We wish to thank those clinicians whose cases are presented and who have allowed us to report them. Finally, we wish to thank our wives, Natalie and Vicki, for their long-suffering approach to our slaving over hot computers when more sociable activities beckoned.

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