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## Preface

Pediatric radiology is considered the oldest subspecialty of diagnostic imaging. Nevertheless, there has been a steady and progressive decline in the number of pediatric radiologists in the last decades, along with a decreased emphasis on pediatric imaging during the training of radiology residents. On the other hand, advances in technology have provided us with imaging studies whose anatomic detail and diagnostic capabilities are better than ever before. The net result of this is a mismatch between what imaging methods can offer and what is effectively achieved by the radiologists, and this is particularly true in pediatrics: the aversion that many general radiologists present to pediatric studies is proverbial. In most cases, this happens because they are not fully acquainted with the normal appearance of the immature organism, sometimes being even unable to distinguish between normal and abnormal findings.

Many books were already written about pediatric radiology, but only a few were devoted to musculoskeletal imaging. Just a handful was specifically dedicated to the immature joint, especially after the advent of cross-sectional imaging, and that is why our book intends to provide the reader with the basics of articular evaluation of children and adolescents, using a direct and concise approach. The chapters try to follow a logical and linear ordering, so that they can be read in sequence and, at the same time, serve as a reference source. Initially, the book describes the peculiarities of the different imaging modalities in the pediatric patient and the anatomic/developmental uniqueness of the growing skeleton on imaging. The infectious and noninfectious arthritides are discussed in the following chapters, as well as some conditions that are important in the differential diagnosis. The articular and periarticular tumors and pseudotumors of the childhood are also studied, as well as Legg-Calvé-Perthes disease, another important pediatric entity. The chapter on musculoskeletal disorders related to hematologic diseases stresses mainly the importance of the hemophilic arthropathy and abnormalities associated with sickle cell disease. The subsequent chapters are about acute osteoarticular trauma and sports-related lesions, both increasingly found in pediatric patients. Spinal abnormalities inherent to the pediatric age group also deserve their own chapter, as well as some selected dysplastic and developmental abnormalities of the immature joint.

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In addition to all the foregoing, it goes without saying that even though written only by three authors, this book is the result of several decades of work, depicting the findings of hundreds of patients diagnosed and treated by hundreds of physicians. To all of them, patients and doctors alike, our acknowledgement and our gratefulness.

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