

Preface

Conventional radiography remains the backbone of musculoskeletal radiology despite the advent of newer and more exciting imaging techniques such as computed tomography, magnetic resonance imaging, and, most recently, positron emission tomography. In contrast to many of these newer methods, conventional radiography is practiced not only by radiologists but also by a large number of clinicians and surgeons. With each examination, one is confronted with radiologic findings that require interpretation in order to arrive at a general diagnostic impression and a reasonable differential diagnosis. To assist the film reader in attaining this goal, this book is based upon radiographic findings unlike most other textbooks in radiology that are disease oriented. Since many diseases present radiographically in a variety of manifestations, some overlap in the text is unavoidable. To minimize repetition the differential diagnosis of a radiographic finding is presented in tabular form whenever feasible. Most tables do not only list the various diseases that my present radiologically in a specific pattern, but also describe in succinct form other characteristically associated radiographic findings and pertinent clinical data. Radiographic illustrations and drawings are included to demonstrate visually the radiographic features under discussion.

The transition from film to digital radiography had the greatest impact on conventional radiology since the publication of the last edition. This change, however, did not affect the way radiologic diagnoses are ascertained. Since the publication of the last edition the name of a few disorders has changed (e.g., histiocytosis X to Langerhans cell histiocytosis) and a few disease are newly recognized (e.g., femoroacetabular impingement). These facts were taken into account in the new edition. The chapters "Localized Bone Lesions" and "Joint Diseases" were completely rewritten and newly illustrated, since I took them over from Dr. Kormano. The chapter "Trauma and Fractures" also under-

went a major overhaul by the inclusion of specific fracture sites. In the remaining chapters of the book the text was updated, many illustrations replaced, and large numbers of new illustrations added.

A changing of the guard has also taken place. Since Dr. Martti Kormano's professional endeavors do no longer include clinical radiology, he felt no longer up the task to update his original contributions to the text. He was however very fortunate to find in Dr. Tomi Pudas a very talented young radiologist to take over the revision of the chapters originally prepared by him.

I hope this new edition will be as well received as its predecessors in the past that were translated into five foreign languages. The concept of an imaging pattern approach in tabular form rather than a disease oriented text was introduced in 1985 with our original edition *Differential Diagnosis in Conventional Radiology* and has since been adopted by many authors. I feel complimented by the old cliché, "imitation is the sincerest form of flattery."

This book is meant for physicians with some experience in musculoskeletal radiology who wish to strengthen their diagnostic acumen. It is a comprehensive outline of radiographic findings and it should be particularly useful to radiology residents preparing for their specialist examination, especially since the exposure to conventional radiography during their training continuously decreased in the past in favor of newer imaging modalities. Any physician involved in the interpretation of conventional bone radiographic examinations should find this book helpful in direct proportion to his or her curiosity.

It is my hope that this new edition will be as well received as the previous ones by medical students, residents, radiologists, and physicians involved in the interpretation of conventional bone radiographs.

Francis A. Burgener, M. D.

Acknowledgements

It is impossible to thank individually all those who helped to prepare the third edition of this textbook. I wish to acknowledge the staff of our publisher Thieme, in particular Dr. Clifford Bergman and Mr. Gert A. Krüger.

I am deeply indebted to Dr. Gertrud Gollman, Steinach am Attersee, Austria, who translated the last edition of this text into German and suggested many alterations and corrections, which have been incorporated into this new edition.

My gratitude goes to all the radiologists whose cooperation made available illustrative cases to compliment the original collection or to replace older illustrations. I am indebted to Drs. Steven P. Meyers, Johnny U. V. Monu, and Gwy Suk Seo, all staff members of the University of Rochester Radiology Department, and to the former residents Drs. John M. Fitzgerald and Wael E. A. Saad for providing selected cases.

I wish to express also many thanks to Jeanette Griebel, Iona Mackey, and Marcella Maier for their assistance in preparing the references and to Shirley Cappiello for her general assistance. Last, but not least, I am most grateful to Alyce Norder who left the University and me after 30 years for the richness of the industry. She is the only person capable of deciphering my longhand and, as in the past, did a superb job in typing, editing, and proofreading the manuscript of the new edition of this text. Despite her heavy workload as executive assistant in her new endeavor. Alyce was kind enough to perform this task in her spare time, for which I am greatly appreciative.

Finally I appreciate the support of my wife Therese, who has generously given her precious family time for the preparation of this book.

Francis A. Burgener, M.D.

I would like to express my deepest gratitude to honorary professor Martti Kormano who invited me to carry on his work in this new edition. I continue to admire the massive work that he and Dr. Burgener originally put into the project in the early nineteen-eighties. The hundreds of hours which Dr. Kormano and I have spent together editing this edition have been a great pleasure. It was a fascinating time in my life.

I especially want to thank Drs. Kimmo Mattila and Seppo Koskinen for introducing me to musculoskeletal radiology, and for their extraordinary teaching and support. Many thanks also belong to Drs. Erkki Svedström, Risto Elo, and Peter B. Dean for encouraging me on my way in the field of

radiology. The many fascinating discussions I have had with Drs. Seppo Kortelainen and Teemu Paavilainen brought me much delight, on non-radiological topics as much as on professional subjects.

I also express sincere thanks to the staff of the publishers, Thieme, especially to Dr. Clifford Bergman and Mr. Gert Krüger. Finally, much gratitude is due to Mr. Markku Livanainen for his valuable assistance with technical questions, and to Ms. Pirjo Helanko for all her help with general matters. Many other individuals helped in various ways with this project, and though I cannot name them all, I am grateful for their contributions.

Tomi Pudas, M.D.