
Foreword

The present book, written by my colleagues Prof. Norbert Hosten and Dr. Thomas Liebig, differs from previous general accounts of computed tomography of the head and spine in that it correlates computed tomography (CT) with the now-established modality of magnetic resonance imaging (MRI). This correlation is evident throughout the text, even when it is not explicitly stated.

At a time when radiologists need to make a selection from the various imaging procedures available and choose the one that will be of greatest benefit to the patient, it is helpful to have a comprehensive reference work that

continually highlights the complementary roles of CT and MRI.

I am pleased that our institution has produced scientists who are so familiar with modern radiographic and sectional imaging techniques that they are able to present CT of the head and spine against the background of other imaging modalities. Among its many strengths, the book is an excellent work for teaching purposes, and I hope it will be widely read and used.

Prof. Roland Felix

Preface

Astounding technical advances in recent years have again led to substantial improvements in the imaging quality of computed tomography (CT). These improvements, in turn, have led to progress in advanced imaging evaluations of the neurocranium, facial skeleton, spinal column, and spinal canal, which were the original focus of CT examinations during the latter half of the 1970s. Faster scanning equipment allows shorter examination times, thinner slices, and contrast-enhanced studies that could not have been anticipated 10 years ago. These technical advances prompted the authors to produce a comprehensive and up-to-date reference work on CT imaging of the head and spine.

In embarking on this project, we found that the tremendous capabilities of magnetic resonance imaging (MRI) in this field have not led to any loss of interest in CT. Indeed, as the depth of the diagnostic information provided by MRI has increased, it has stimulated even greater interest in CT, which is almost always the initial imaging procedure. With the advent of modern imaging-guided therapeutic techniques, this relatively low-cost study, which can be used in virtually all patients, has received fresh impetus for further development.

Prof. Felix, the quality of whose teaching in both the clinical and scientific fields has earned our immense respect, gave us the opportunity to acquire practical and theoretical experience in head and spine imaging. His reports dealing with temperature-related effects on diagnosis and treatment, and on the methodology and clinical aspects of hyperthermia, have made a significant contribution to the diagnostic aspects of imaging-guided therapeutic procedures, in particular.

We would like to express special thanks to Prof. Dietel, Director of the Department of

Pathology at the Charité Hospital in Berlin, for his kind permission to publish photographs of specimens from the hospital's teaching collection.

We are grateful to Prof. von Deimling, Director of the Department of Neuropathology, for providing the documentation for several histological examinations.

We would also like to acknowledge the role played by professional conferences in neurosurgery, neuropathology, and neuroradiology in advancing our understanding of the diseases covered in this book.

Our thanks go to Mrs. Heimann and Mrs. Naujok of the Film and Graphics Department at the Charité Hospital for the patience with which they prepared the graphics for the book, and we are grateful to Mrs. Rösel and Mrs. Kuzmik of the photographic section of the Department of Radiology for the great care and patience with which they processed the photographic materials. Mrs. Fiebelkorn checked the language of the whole of the original German version for errors.

We would also like to acknowledge the help of the CT team in the Radiology Department and Outpatient Department in meeting our special requirements with regard to documentation and postprocessing. Dr. Rosenthal helped the authors by explaining certain issues from the neurosurgeon's perspective.

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