

Foreword

Since magnetic resonance imaging (MRI) was first introduced into clinical medicine more than 25 years ago, tremendous advances have been made both in the technology and in the clinical applications of the method, particularly during the last 10 years. MRI is now a core imaging modality and represents an extremely effective method of diagnosing various diseases in every region of the body.

The advances made in recent years have optimized techniques for examining the chest and heart, abdominal organs, urogenital system, and musculoskeletal system. Higher magnetic fields and total body examinations are becoming clinical realities. In view of these dynamic developments, there is, of course, a need for continuous learning. The present volume provides systematic coverage of the various

disease entities that can be identified on MRI, with clearly organized tables and charts listing the details of examination strategies at a glance. Along with the outstanding illustrations, the book offers a conceptual framework for everyday use.

This book may help experienced colleagues, as well as residents and fellows, to understand the physical basis for MRI, and it may be able to guide them not only in the correct choice of techniques, but also in the appropriate and rational use of contrast media. MRI has a bright future in clinical diagnosis and scientific research, and this book provides an excellent reflection of the current state of the specialty.

Ulrich Moedder

Preface

Since the introduction of magnetic resonance imaging (MRI) in the early 1980s, the indications for the procedure have been constantly expanding, and it has at least partly replaced computed tomography (CT) for a variety of investigations—despite the rapid advances being made in CT technology at the same time. With continual advances in equipment, pulse sequences, and contrast agents, MRI has become established as one of the most important modalities in the repertoire of diagnostic imaging.

Our aim in this book has been to convey the basic principles and current information in the field of magnetic resonance diagnosis and to present the full range of MRI findings that are relevant in everyday practice. With its copious illustrations and tables, the book is therefore intended to be useful not only as a resource for training and continuing education in radiology, but also as a reference work for experienced users.

Although more recent aspects such as MR examinations at 3 tesla, whole-body MRI, and whole-body MR angiography are included in this edition, it is not possible for the book to be completely up-to-date regarding every aspect of MRI at the time of publication. However, the information presented on typical pathological findings and associated imag-

ing modalities is still generally valid. The authors are well aware that continuing advances in knowledge will require a new edition in the near future. We would therefore be grateful for any suggestions or constructive criticisms, which can be sent to the editors or the publisher.

Special thanks are due to the authors of the individual chapters, in which the MRI features of the major disease processes in every region of the body are fully explained and extensively illustrated.

We are also grateful to the staff at Thieme Medical Publishers who were involved in the production of the book. Particular mention should be made of the dedicated work of Gabriele Kuhn, Elisabeth Kurz, and the translator, Terry Telger, who were indispensable in bringing this English edition to press. We would also like to thank Prof. Ulrich Moedder, former president of the German Radiological Society, for his suggestions regarding the project and for his support.

We hope this book will help its readers—both younger and more experienced colleagues—to use MRI for the benefit of the patients in their care.

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