Common Pitfalls in Multiple Sclerosis and CNS Demyelinating Diseases

Case-Based Learning

Common Pitfalls in Multiple Sclerosis and CNS Demyelinating Diseases

Case-Based Learning

B. Mark Keegan
Mayo Clinic College of Medicine, Rochester, MN, USA

CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE
UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org
Information on this title: www.cambridge.org/9781107680401

First published 2016

Printed in the United Kingdom by TJ International Ltd. Padstow Cornwall

A catalogue record for this publication is available from the British Library

Library of Congress Cataloguing in Publication data
Keegan, B. Mark, author.
Common pitfalls in multiple sclerosis and CNS demyelinating diseases : case-based learning / B. Mark Keegan.
Cambridge, U.K. ; New York : Cambridge University Press, 2016. |
Includes bibliographical references and index.
LCCN 2015042977 | ISBN 9781107680401 (paperback)
| MESH: Multiple Sclerosis – diagnosis – Case Reports. | Multiple Sclerosis – therapy – Case Reports. | Demyelinating Diseases – diagnosis – Case Reports.
LCC RC377 | NLM WL 360 | DDC 616.8/34–dc23
LC record available at http://lccn.loc.gov/2015042977

ISBN 978-1-107-68040-1 Paperback

Contents

Contents

Preface

This book is a case-based instructional that will assist the reader in evaluating patients with neurological presentations that may be due to central nervous system demyelination, particularly multiple sclerosis (MS), and distinguishing the presentation of MS from other competing neurological diagnoses. This book is of importance for a number of reasons. Some people have neurological symptoms and signs that are due to MS. It is critical to make a confident MS diagnosis, particularly given the new, expanding and broadening availability of therapies for relapsing forms of MS. Just as importantly, however, many people have neurological symptoms and signs that are not due to MS, and have an alternative neurological diagnosis or, in fact, no neurological diagnosis or disease. It remains just as critical to provide a diagnosis and therapies for "other" neurological diseases where available, or guide the patient away from potentially toxic therapies for a suspected MS that is not present.

The book is aimed at those with some degree of neurological education and experience; however, a highly structured approach to MS diagnosis, namely a three-step diagnostic process, is emphasized throughout to demonstrate how even complicated presentations may be "made simple" to ease the evaluation. Initial chapters explain this diagnostic process and how it is used to diagnose MS. Subsequent chapters proceed on an anatomical basis to evaluate MS presentations in that level of the central nervous system and MS-mimicking diseases that constitute alternative diagnoses. The chapters are presented in anatomical order to assist the reader if they come across a challenging case with a certain anatomical presentation by providing direct references to potential MS mimickers at different levels of the nervous system.

Diagnosing neurological diseases is easier when a structured diagnostic process is used and when prior experience has provided other examples where "pattern recognition" facilitates rapid identification of a certain disease. This book therefore provides a three-step process to help the reader diagnose MS in patients.

The cases themselves are selected to present decision-making points using the three-step process to assess how likely or unlikely the presentation represents MS. Key diagnostic and therapeutic tips are provided to highlight the main points regarding each case. Comprehensive and detailed discussions about the pathophysiology and treatment of MS and mimicking diseases are not emphasized and the reader is directed to further references that will provide a more exhaustive level of detail.

It is hoped that this book, with its highly clinically relevant cases and straightforward manner of assessing challenging presentations of MS and related diseases, will be an enjoyable and informative addition to standard textbooks of these conditions.