Clinical Problems in Gastroenterology



Clinical Problems in Gastroenterology

Editor

Her Hsin Tsai MD FRCP FECG
Consultant Gastroenterologist
Inflammatory Bowel Disease Unit
Department of Gastroenterology
Hull and East Yorkshire Hospitals
NHS Trust, Hull, UK

Foreword

Jonathan Rhodes



JAYPEE BROTHERS MEDICAL PUBLISHERS
The Health Sciences Publisher
New Delhi | London | Panama

Jaypee Brothers Medical Publishers (P) Ltd

Headquarters

Jaypee Brothers Medical Publishers (P) Ltd
4838/24, Ansari Road, Daryaganj
New Delhi 110 002, India
Phone: +91-11-43574357
Fax: +91-11-43574314
E-mail: jaypee@jaypeebrothers.com

Overseas Offices

J P Medical Ltd
83 Victoria Street, London
SW1H 0HW (UK)
Phone: +44 20 3170 8910
Fax: +44 (0)20 3008 6180
E-mail: info@jpmedpub.com

Jaypee-Highlights Medical Publishers Inc
City of Knowledge, Bld. 235, 2nd Floor, Clayton
Panama City, Panama
Phone: +1 507-301-0496
Fax: +1 507-301-0499
E-mail: cservice@jphmedical.com

Jaypee Brothers Medical Publishers (P) Ltd
Bhotahity, Kathmandu, Nepal
Phone: +977-9741283608
Email: kathmandu@jaypeebrothers.com

Website: www.jaypeebrothers.com
Website: www.jaypeedigital.com

© 2019, Jaypee Brothers Medical Publishers

The views and opinions expressed in this book are solely those of the original contributor(s)/author(s) and do not necessarily represent those of editor(s) of the book.

All rights reserved. No part of this publication may be reproduced, stored or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission in writing of the publishers.

All brand names and product names used in this book are trade names, service marks, trademarks or registered trademarks of their respective owners. The publisher is not associated with any product or vendor mentioned in this book.

Medical knowledge and practice change constantly. This book is designed to provide accurate, authoritative information about the subject matter in question. However, readers are advised to check the most current information available on procedures included and check information from the manufacturer of each product to be administered, to verify the recommended dose, formula, method and duration of administration, adverse effects and contraindications. It is the responsibility of the practitioner to take all appropriate safety precautions. Neither the publisher nor the author(s)/editor(s) assume any liability for any injury and/or damage to persons or property arising from or related to use of material in this book.

This book is sold on the understanding that the publisher is not engaged in providing professional medical services. If such advice or services are required, the services of a competent medical professional should be sought.

Every effort has been made where necessary to contact holders of copyright to obtain permission to reproduce copyright material. If any have been inadvertently overlooked, the publisher will be pleased to make the necessary arrangements at the first opportunity. The **CD/DVD-ROM** (if any) provided in the sealed envelope with this book is complimentary and free of cost. **Not meant for sale**.

Inquiries for bulk sales may be solicited at: jaypee@jaypeebrothers.com

Clinical Problems in Gastroenterology

First Edition: **2019**

ISBN: 978-93-5270-585-6

Printed at

Dedicated to

The loving memory of
My Father, My Inspiration

Contributors

Barry Taylor FRCS
Consultant Surgeon
Surgery Division
Warrington and Halton Hospitals
NHS Foundation Trust
Warrington, UK

Benjamin Chan
MBChB (Hons) MRes MRCS
Hepatobiliary Research Fellow
University of Liverpool
Department of Hepatobiliary Surgery
Aintree University Hospital
Liverpool, UK

Her Hsin Tsai MD FRCP FECG
Consultant Gastroenterologist
Inflammatory Bowel Disease Unit
Department of Gastroenterology
Hull and East Yorkshire Hospitals
NHS Trust, Hull, UK

Lynsey Corless MBChB PhD FRCP
Consultant Hepatologist
Liver Unit
Department of Gastroenterology
Hull and East Yorkshire Hospitals
NHS Trust
Hull Royal Infirmary
Hull, UK

Foreword

There are many reviews and guidelines on the management of specific conditions available on the internet, but they are often blocked by paywalls and are of varying clarity and currency. Moreover, it can be hard to find good quality guidance to help in diagnosis. In *Clinical Problems in Gastroenterology*, Her Hsin Tsai and his colleagues have done a really great job in writing with great clarity and accuracy about the current management of gastrointestinal and liver conditions. The problem-based structure also makes this an excellent guide to diagnosis. Whilst increasing attention is paid to training in practical skills such as endoscopy, acquisition of diagnostic skills has in the past too often been left to chance—to be accrued by experience—too often by "trial and error". A good-read of this book by clinicians, who are either relatively new to the specialty or simply in need of some educational refreshment should go a long way to providing valuable "virtual" experience.

Jonathan Rhodes MA MD FRCP FMed Sci
Emeritus Professor
Department of Medicine
University of Liverpool, UK
Past-President
British Society of Gastroenterology

Preface

In 1995 Professor Jonathan M Rhodes and I wrote a book of the same title, now long out of print. There has been many changes and advances in the specialty and the book is now completely rewritten, and all the clinical images and illustrations are new and fresh, thanks in no small part to the excellent graphics team at Jaypee Brothers Medical Publishers, New Delhi, India.

Many medical textbooks follow a traditional format of organ-based layout or by disease headings. While this may work in some specialties, it is quite unhelpful in a clinical specialty like gastroenterology. Here, patients present with a symptom, not with a disease. It is not always evident with the clinical presentation which organ may be the cause of the problem.

In this book I, with my specialty contributors, shall attempt to approach the subject from a practical problem-orientated manner. Each chapter is major clinical problem and the reader is led up a path of rational clinical decision making in arriving at the right diagnosis or choosing the right diagnostic test or imaging modality to make the right diagnosis. Hence, most chapters will be in two parts. The first section will be "Reaching a Diagnosis" and the second section will be on "Conditions Causing" the problem. However, this basic model is adapted for each clinical problem.

We live in an age when information is freely available at a click of a mouse or a swipe of a mobile device's screen. However, it is still the clinicians' role to make the necessary decisions to arrive at the right diagnosis in a timely manner with the efficient use of the diagnostic tools. Some investigations are unpleasant and not without risks. It is hoped that this approach will amply equip the gastroenterology trainee or fellow. It should also contain the bulk of the knowledge base required by the European Section and Board of Gastroenterology and Hepatology examination.

It is the publisher's policy to have all their medical titles published with American spellings. I apologise to UK readers but it is beyond my control. It is hoped it does not offend those who prefer standard English spellings.

Her Hsin Tsai
Beverley, UK
18/08/2018

Acknowledgments

I am grateful to my contributors, Dr Lynsey Corless, who wrote the hepatology chapters and Mr Benjamin Chan and Mr Barry Taylor, who wrote the chapter on the acute abdomen. I would also like to thank Drs Corinna Hauff, James Cast, and Christopher Keegan, for providing radiological images and Dr Laszlo Karsai for providing some of the histological images. Finally, to my patients for their support of this project and giving free consent to the publication of clinical images.

I am grateful for the constant support and encouragement of Shri Jitendar P Vij (Group Chairman) and Mr Ankit Vij (Managing Director), M/s Jaypee Brothers Medical Publishers (P) Ltd, New Delhi, India, in publishing this book and also their associates, particularly Ms Chetna Malhotra Vohra (Associate Director—Content Strategy) and Ms Prerna Bajaj (Development Editor) who have been prompt, efficient and most helpful.

Contents

1. **Chronic or Recurrent Abdominal Pain 1**
   Her Hsin Tsai
   - Reaching A Diagnosis *1*
   - Conditions Causing Chronic or Recurrent Abdominal Pain: Natural History and Management *21*
2. **Acute Abdomen 55**
   Benjamin Chan, Barry Taylor
   - Reaching a Diagnosis *55*
   - A Step-by-step Approach to Acute Abdominal Pain *58*
   - Conditions Causing Acute Abdominal Pain: Natural History and Management *73*
   - Intestinal Obstruction *88*
   - A Step-by-step Approach to Intestinal Obstruction *88*
   - Vascular Abnormalities *94*
3. **Diarrhea 102**
   Her Hsin Tsai
   - Reaching a Diagnosis *102*
   - Conditions Causing Diarrhea: Natural History and Management *127*
   - Secretory Diarrhea *178*
4. **Constipation 182**
   Her Hsin Tsai
   - What is Constipation? *182*
   - Is it Primary Constipation? *185*
   - Is it Constipation-predominant Irritable Bowel Syndrome? *185*
   - Is it Slow-transit Constipation? *186*
   - Is it Pelvic Floor Dysfunction? *187*
   - Is it Secondary Constipation? *188*
   - Is there Hirschsprung's Disease? *189*
   - Solitary Rectal Ulcer Syndrome *189*
5. **Anorectal Problems 191**
   Her Hsin Tsai
   - Diagnosis *191*
   - Natural History and Management of Anorectal Conditions *195*
6. **Gastrointestinal Bleeding and Anemia 205**
   Her Hsin Tsai
   - Reaching a Diagnosis and Management *205*

- Conditions Causing GI Bleeding: Natural History and Management *213*
- Other Causes of Non-variceal Upper GI Bleeding *219*
- Rarer Causes of Small Intestinal Bleeding *233*
- Colonic Bleeding *235*
- Other Colonic Malignancies *253*

7. Nausea and Vomiting 256
Her Hsin Tsai
- Neurophysiology of Nausea and Vomiting *256*
- Diagnosis *257*
- Drug Therapy of Vomiting *264*

8. Eating Disorders and Weight Loss 265
Her Hsin Tsai
- Physiology of Appetite *265*
- Anorexia and Weight Loss *267*
- Anorexia Nervosa *269*
- Obesity *270*

9. Wind 274
Her Hsin Tsai
- Belching *274*
- Flatus *274*
- Bloating *276*

10. Gastrointestinal Complications of Obesity Surgery and Other Gastric Operations 279
Her Hsin Tsai
- Abdominal Pain *281*
- Vomiting *283*
- Dysphagia *283*
- Diarrhea *284*

11. Esophageal Pain and Difficulty with Swallowing 288
Her Hsin Tsai
- Diagnosis *288*
- Natural History and Management *300*

12. Jaundice 319
Lynsey Corless
- Reaching a Diagnosis *320*
- Specific Conditions Causing Jaundice *326*

13. Abdominal Masses and Swelling 334
Her Hsin Tsai
- Generalized Swelling *334*
- Hepatomegaly *336*
- Splenomegaly *339*
- Renal Mass *340*
- Other Localized Masses *341*
- Liver Tumors *343*
- Hepatic Cysts and Abscesses *347*

14. Liver Failure 351
Lynsey Corless
- Acute Liver Failure *351*
- Cirrhosis as a Consequence of Chronic Liver Disease *356*
- LT and Transjugular Intrahepatic Portosystemic Shunt *370*

15. Abnormal Liver Biochemistry.....375
Lynsey Corless
- Reaching a Diagnosis *375*
- Abnormal LFT in Pregnancy *384*
- Guidance on Specific Conditions *385*

16. Enteral and Parenteral Nutrition.....399
Her Hsin Tsai
- Is the Patient at Risk of Malnutrition? *399*
- Does the Patient have Dysphagia? *400*
- Is the Patient at Risk of Refeeding Syndrome? *401*
- Types of Feeds *403*
- Parenteral Nutrition *405*

Index 407