Case Studies in Abdominal and Pelvic Imaging

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To Martin, Alfred, Arnold and Freddie, for making it all worthwhile. Thanks also to my parents Robin and Gisela Joarder for all their support over the years.

Rita Joarder

Dedicated to my wife and children for being themselves and all anyone could ask for. Thanks to my generous colleagues in Reading who selflessly contributed some of the cases.

Matthew Gibson

To Kay, Ruth and Mark and in memory of Edwin.

Neil Crundwell

Preface

Case Studies in Abdominal and Pelvic Imaging is a collection of 100 real cases, encompassing a broad range from common medical and surgical problems to more rare but interesting pathologies.

The cases demonstrate the use of modern imaging techniques that are generally commonplace to most hospitals, and illustrate how multiple modalities can be used in the investigation of pathology.

The advent of PACS has meant images are more readily available to clinicians for review in clinics, wards, etc. With the increasing number of multi-disciplinary meetings, the imaging of more cases is reviewed and demonstrated by radiologists to a wider group of clinicians. It is therefore important to have an understanding of imaging and not simply to read the report.

In addition more US is being performed as an extension of examination and a good understanding of the appearances and pathologies that may be demonstrated by this clinician-performed US is essential.

This book is aimed at a broad range of specialties including gastroenterology, general and GI surgery, gynaecology and urology and also radiologists in training and medical students.

In addition, we intend its use to extend to those allied professionals who regularly review imaging when treating their patients, e.g. cancer specialist nurses and endoscopists.

The structure of the book is designed to enable the reader to study 100 cases. Each commences with a brief history, accompanied by the relevant images and questions on one page. The answers to the questions are found on the next page, with annotated images demonstrating the salient features. There is then a brief discussion of the condition, key teaching points, references and suggested further reading. This format reflects changes in medical education, where some of the more traditional formats have been replaced by clinical scenarios which often include an element of imaging.

We hope the cases will be interesting as well as educational.

Rita Joarder Neil Crundwell Matthew Gibson

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Abbreviations

AAA Aortic aneurysm
AD Autosomal dominant
AFP Alpha-fetoprotein

AIDS Acquired immune deficiency syndrome

APCKD Adult polycystic kidney disease

AXR Abdominal X-ray
BP Blood pressure
CA Coeliac axis
CBD Common bile duct
CE Contrast enhanced

CEA Carcinoembryonic antigen
CEUS Contrast enhanced ultrasound

CHD Common hepatic duct

CLO Campylobacter-like organism test

CRP C-Reactive protein
CT Computed tomography

CTA CT angiogram

CTU Ct urography, Ct urogram

CXR Chest X-ray

DWI Diffusion weighted imaging

ERCP Endoscopic retrograde cholangiopancreatography

ESR Erythrocyte sedimentation rate

EUS Endoscopic ultrasound EVAR Endovascular repair

FDG Fluorine 18 labelled deoxy-glucose

FNA Fine needle aspiration
FNH Focal nodular hyperplasia

Gadolinium

BOPTA Gadolinium benzyloxypropionictetra-acetate

GB Gall bladder
GI Gastro-intestinal

GIST Gastro intestinal stromal tumour

GP General Practitioner
GU Genitourinary tract
Hb Haemoglobin

HCC Hepatocellular carcinoma HRCT High resolution CT