FRCR Part 1 Anatomy Mock Examinations

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Dedicated with love and gratitude to my mother, father and Juliette.
And to Jon Lund, to whom I shall always remain indebted. (AS)

To my dear wife Maeve, for all her love and support, and
to my parents, who have always been there for me. (BS)

To my dear wife, Joanna, and the children, Tom, Ella,
Robert and Miles, and also for Christopher. (DH)

To my wife, Siobhan, and four children, Emily,
Hugh, Annabel and Miles. (NT)

Nicholas Taylor

Nicholas Taylor is a medical photographer with over thirty years of experience. He trained at Guy's Hospital before taking up posts at hospitals on the south coast, and has been the Senior Medical Photographer at Eastbourne District General Hospital for the last twenty years. He is a member of the Institute of Medical Illustrators and a registered medical illustration practitioner.

His role within the department has enabled him to contribute images and illustrations to numerous articles, journals and medical textbooks, as well as local history books of the Eastbourne area.

Recently, he has been responsible for the preparation of images for hundreds of medical cases for the e-learning element of undergraduate medical teaching on behalf of the Brighton and Sussex Medical School.

His expertise means that the Royal College of Radiologists has entrusted him with preparing the images for the FRCR Part 1 exams, and thus the standard of images used within this book equates very closely with those that will be found in the exams.

We, the authors, would like to pay tribute and give our immense thanks and gratitude to Nicholas Taylor for all his hard work on this book, from the front cover to the back page.

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Foreword

Examinations may not be the most popular aspect of medical training but they are an essential part of our education system and make an important contribution to the very high standard of medicine in the United Kingdom. Structured testing is an objective and effective method of testing knowledge. This is especially true in the field of radiology, as it is possible to combine questions with images, thus bringing this form of testing closer to the reality of everyday life than is possible in many other medical specialities. Dr Aidan Shaw, Dr Benjamin Smith and Dr David Howlett have produced an outstanding book, which combines searching questions, testing important aspects of radiological anatomy, with excellent images that clearly demonstrate the findings. The questions are clear, succinct and readable and the quality of the images is superb. I believe that this book will prove very popular with radiologists preparing for examinations and will make revision (almost) a pleasure!

Professor Andy Adam,
Professor of Interventional Radiology

Introduction

In 2010 the Royal College of Radiologists reintroduced the anatomy component of the FRCR Part 1 examination. The primary aim of this book is to provide trainee radiologists with a focused and invaluable revision aid when preparing for this exam. Its utility is not just limited to radiologists, however, and other groups such as radiographers and medical students will also find the detailed images and descriptions helpful to their studies. This book was written to be complementary to existing formal anatomy texts, and is intended to be used in conjunction with them.

The ten mock examinations within this book have been designed to closely conform with the new syllabus set out by the RCR. Each exam is laid out and structured in the same way as the actual papers, ensuring that readers will gain familiarity with both the content and the style of the examination. By the end of the book, readers will have encountered every imaging modality and the majority of cases covered in the exam itself. The answer sections include detailed explanations of the relevant anatomy, along with helpful learning tips and clinical applications.

The anatomy syllabus is available on the college website and should be studied closely. It is broadly divided into four categories: head and neck; thorax; abdomen and pelvis; and musculoskeletal system. Candidates can expect the examination to have roughly equal proportions from each category in the examination. It is specified in the 2010 syllabus that paediatric imaging of all ages will be included. Nuclear medicine, including positron emission tomography, is specifically excluded from the anatomy curriculum. All other major imaging modalities will be used in the exam, including radiographs, fluoroscopy, CT, MRI and ultrasound.

The new FRCR Part 1 anatomy examination is 75 minutes long and consists of 20 radiological images with five questions on each. Candidates will view the images on Apple Mac Mini workstations equipped with 19" monitors and running Osirix image-viewing software. Answers will be hand-written and are to be recorded in the provided question booklet.

To gain maximum marks for each question, the candidate must correctly identify the labelled structure and, if applicable, state which side the structure is on. For instance, answering 'kidney' might earn half of the marks, whereas answering 'right kidney' would earn the maximum credit. If the candidate gives the wrong side then no marks are awarded, so guessing is not recommended. If the labelled structure is a vertebra or nerve root, be sure to include the level in the answer if possible. Where the side is already provided in the question it is not necessary to repeat this in the answer. The candidate must ensure that the answer is legible and spelt correctly.

The majority of questions in the exam simply ask the candidate to name the labelled anatomical structure. There are some questions that go beyond this and further test anatomical knowledge. Examples of these include, 'What anatomical variant is present on the image?' and, 'What attaches to the labelled structure?' It is therefore extremely important to read each question carefully to ensure an appropriate answer is given.

So how can the reader best prepare for the new FRCR Part 1 anatomy exam? As always, it is advisable to start preparing well in advance and avoid last minute

cramming in the final few days. It is worth using a variety of revision aids, including established anatomy textbooks, radiological atlases and practice papers. The mock exams in this book will be invaluable preparation, and we recommend that at some point the reader should attempt them under exam conditions to get a feel of the pace required. Perhaps the best advice we can offer is: read each question carefully and always, always remember to name the side.

It is possible that the exam format may change over the coming years, although the basic concept of an annotated image and five labels is likely to be retained and, as such, this book will act as a valuable revision aid regardless of how questions are structured.