Dr Podcast Scripts for the Final FRCA

'This book is an extremely valuable resource for anyone preparing for the Final FRCA, and indeed anyone seeking a refresher in clinical anaesthesia. It covers the breadth of subjects required by the exam, with the topics discussed in sufficient detail to give the reader a sound understanding. The question-and-answer format is very engaging and easy to follow. I particularly appreciate the sections in italics where the authors speak to the reader giving context, advice or reminders to guide exam technique and provide support.

As a college tutor, I am grateful to the excellent team of editors and authors for preparing such a superb second edition and I'm looking forward to using it to help the resident doctors I work with to prepare for the Final FRCA, and to refresh my own knowledge too.'

Dr Emma Plunkett Consultant Anaesthetist Birmingham Women's Hospital and University Hospitals Birmingham

Dr Podcast Scripts for the Final FRCA

Second Edition

Edited by **Rebecca Leslie**

Royal United Hospitals NHS Foundation Trust, Bath

Emily Johnson Worcester Acute Hospitals NHS Trust, Worcester

Gary Thomas Cwm Taf Morgannwg University Health Board, Bridgend

Philip Harrington West Midlands Deanery, Birmingham





Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314-321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi - 110025, India

103 Penang Road, #05-06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org Information on this title: www.cambridge.org/9781009267465

DOI: 10.1017/9781009267441

First edition \circledast Rebecca A. Leslie, Emily K. Johnson, Gary Thomas and Alex Goodwin 2011

Second edition © Cambridge University Press & Assessment 2025

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press & Assessment.

When citing this work, please include a reference to the DOI 10.1017/9781009267441

First published 2011

Second edition 2025

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

A Cataloging-in-Publication data record for this book is available from the Library of Congress

ISBN 978-1-009-26746-5 Paperback

Cambridge University Press & Assessment has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

.....

Every effort has been made in preparing this book to provide accurate and up-to-date information that is in accord with accepted standards and practice at the time of publication. Although case histories are drawn from actual cases, every effort has been made to disguise the identities of the individuals involved. Nevertheless, the authors, editors, and publishers can make no warranties that the information contained herein is totally free from error, not least because clinical standards are constantly changing through research and regulation. The authors, editors, and publishers therefore disclaim all liability for direct or consequential damages resulting from the use of material contained in this book. Readers are strongly advised to pay careful attention to information provided by the manufacturer of any drugs or equipment that they plan to use.

> Dedicated to my parents, and to my wife Georgie for all her support and patience through my training, exams and work on this book – Phil Harrington

> To Stu and my family – thanks for all your patience and understanding

- Emily Johnson

Contents

Contributors to the First Edition xiii List of Contributors xv Preface xxi

Section 1 Medicine

- 1.1 Bone, Joint and
 Connective Tissue 1
 1.1.1 Rheumatoid Arthritis 1
 Jade A Loughran and Sarah F Bell
- 1.2 Cardiovascular 7 1.2.1 Preoperative Assessment and Management of Patients with Cardiac Disease 7 Timothy JB Wood and Andrew Weir 1.2.2 Arrhythmias 12 Rebecca A Leslie and Sophia Henderson 1.2.3 Hypertension 17 Matthew JC Thomas and Andrew Weir 1.2.4 Ischaemic Heart Disease and Congestive Cardiac Failure 20 Alexander Midgley-Hunt 1.2.5 Postoperative Management of Myocardial Ischaemia 27 Michael John Scerri and Andrea Binks 126 Valvular Defects 31 Nirav D Patel and Mari H Roberts 1.2.7 Cardiomyopathy 38 Richard LI Skone and Andrew Weir 1.2.8 Pacemakers 41 Menanta van Velze and William A English
- 1.3 Endocrine and Metabolic 461.3.1 Hormonal and Metabolic Response to Trauma 46Ashley C Davis

1.3.2 Endocrine Disease and Perioperative Steroid Management 51 Niladri Das 1.3.3 Obesity 54 Caroline SG Janes 1.3.4 Perioperative Management of Diabetes 60 Andrea Binks 1.3.5 Calcium and Magnesium Homeostasis 69 Farzad Saadat and Sarah F Bell 1.3.6 Hypokalaemia and Hyperkalaemia 72 Farzad Saadat and Sarah F Bell 1.3.7 Hyponatraemia and Hypernatraemia 75 Farzad Saadat and Sarah F Bell 1.3.8 Hypothermia 79 Ashley C Davis 1.3.9 Hyperthermia 83 Steffan Morgan and Ami Jones 1.3.10 Thyroid Disease and Thyroid Surgery 88 Helen L Jewitt and Stephanie Wallis 1.3.11 Phaeochromocytoma 91 Caroline SG Janes and Prakash Vadukul

1.4 Gastrointestinal 98
1.4.1 Enteral and
Parenteral Nutrition 98
Caroline SG Janes and Prakash
Vadukul

Contents

viii

Cambridge University Press & Assessment 978-1-009-26746-5 - Dr Podcast Scripts for the Final FRCA Edited by Rebecca Leslie, Emily Johnson, Gary Thomas, Philip Harrington Frontmatter More Information

1.4.2 Nutritional Requirements 1.8.3 Pneumonia 183 and Malnutrition 103 Matthew P Morgan and Andrew Weir Caroline SG Janes and Prakash 1.8.4 Lung Cancer and Interstitial Vadukul Lung Disease 186 1.4.3 Postoperative Nausea and Alexander Midgley-Hunt Vomiting (PONV) 108 1.9 Renal 193 Alison J Brewer 1.9.1 Renal Failure 1.4.4 Oesophageal Reflux 112 Rosada Jackson and Michael B Clarke Jessie R Welbourne 1.4.5 Pancreatitis 116 Matt Thomas Section 2 Surgery 1.5 Haematological 122 2.1 Cardiothoracic 199 1.5.1 Blood Groups 122 2.1.1 Anaesthesia for Cardiac Surgery, Sophia Henderson and Rebecca A Leslie Cardiopulmonary Bypass 1.5.2 Anaemia and and Cardioplegia 199 Abnormal Haemoglobins 127 Jessie R Welbourne and Katharine Farzad Saadat and Sarah F Bell Smurthwaite 1.5.3 Abnormalities of Coagulation and 2.1.2 Anaesthesia of the Cardiac Haemostasis including Patient for Non-cardiac Surgery Massive Haemorrhage 132 Michael John Scerri and Philip Harrington and Justin Andrea Binks C Mandeville 2.1.3 Congenital Heart Disease 1.5.4 Anticoagulant, Antiplatelet and Luke Foster Anti-fibrinolytic Agents 140 2.1.4 Care of the Postoperative Benjamin Hofland-Ward, Cardiac Surgery Patient 218 Alexandra K Freeman and Susanna T Walker Luke Foster 2.1.5 Anaesthesia 1.5.5 Thromboembolism 150 for Bronchoscopy 228 Steffan Morgan and Ami Jones Neil Rasburn and Zoe Riddell 1.6 Hepatic Medicine 158 2.1.6 One-Lung Ventilation 233 1.6.1 Hepatic Failure 158 Carl J Morris and Zoe Riddell Matt Thomas 2.1.7 Anaesthetic Management of 1.6.2 Jaundice 164 Patients with Transplanted Organs Dana L Kelly and Andrew Weir including Heart, Lungs and Kidneys 238 1.7 Neurological and Muscular 169 Asim Iqbal 1.7.1 Myasthenia Gravis and 2.1.8 Off-Pump Cardiac Surgery Muscle Diseases 169 Anandh Balu Helen L Jewitt and Stephanie Wallis 2.1.9 Intra-aortic Balloon 1.8 **Respiratory** 174 Counterpulsation and Other 1.8.1 Pneumothorax 174 Assist Devices 247 Matthew P Morgan and Stephen Philip Harrington Pearson 2.2 DayCase 250 1.8.2 Chronic Obstructive Pulmonary 2.2.1 Daycase Selection Disease and Asthma 177 Alison J Brewer Matthew P Morgan and Andrew Weir

250

245

206

211

193

2.3	ENT 256	2.5.7 Anaesthesia during an
	2.3.1 Difficult Airway 256	MRI Scan 322
	Kate Leaper and Jonathan J Gatward	Farzad Saadat and Sarah F Bell
	2.3.2 Performing	2.5.8 Depth of
	a Tracheostomy 262	Anaesthesia Monitoring 327
	James W Pearlman and Jonathan	Benjamin Hofland-Ward and
	J Gatward	Susanna T Walker
	2.3.3 Bleeding Tonsil and	2.5.9 Electroconvulsive Therapy
	Foreign Body 266	(ECT) and Anti-psychotics 334
	Caroline SG Janes	Amin Elkhawad
	2.3.4 Obstructive Sleep Apnoea 272	2.5.10 Epilepsy 338
	Jade A Loughran and Sarah F Bell	Imran Mohammad and Stephen
	2.3.5 Upper Airway Infections 275	Pearson
	Jade A Loughran and Sarah F Bell	2.5.11 Spinal Surgery and
	2.3.6 Anaesthesia and	Neuromuscular Monitoring 342
	Facial Fractures 280	Alexandra K Freeman
	Gary Thomas	2.5.12 Anaesthesia for
.4	Enhanced Recovery 286	Awake Craniotomy 345
	2.4.1 Principles of	Alexandra K Freeman
		6 Obstetrics 349
	Ruth Doolin	2.6.1 Physiological and
	2.4.2 Minimally Invasive Surgery 290	Anatomical Changes
	Lucinda Williams	of Pregnancy 349
5		Jade A Loughran and Sarah F Bell
.5	Neurosurgery 294 2.5.1 Head Injury and Control	2.6.2 Anaesthesia in
	of ICP 294	Early Pregnancy 352
	Justin C Mandeville and	Farzad Saadat and Sarah F Bell
	Menanta van Velze	2.6.3 Complications of
	2.5.2 Principals of Craniotomy	Pregnancy 356
	(including Epilepsy Surgery) 298	Farzad Saadat and Sarah F Bell
	(including Epilepsy surgery) 290	264 Dro octomoria 261
	Alexandra K Freeman	2.6.4 Pre-eclampsia 361
	Alexandra K Freeman	Jade A Loughran and Sarah F Bell
	2.5.3 Subarachnoid	Jade A Loughran and Sarah F Bell 2.6.5 Labour Analgesia 367
	2.5.3 Subarachnoid Haemorrhage 303	Jade A Loughran and Sarah F Bell 2.6.5 Labour Analgesia 367 Shakira Nathoo
	2.5.3 Subarachnoid Haemorrhage 303 Justin C Mandeville and Philip	Jade A Loughran and Sarah F Bell 2.6.5 Labour Analgesia 367 Shakira Nathoo 2.6.6 Placenta Praevia 370
	2.5.3 Subarachnoid Haemorrhage 303 Justin C Mandeville and Philip Harrington	Jade A Loughran and Sarah F Bell 2.6.5 Labour Analgesia 367 Shakira Nathoo 2.6.6 Placenta Praevia 370 Shakira Nathoo
	 2.5.3 Subarachnoid Haemorrhage 303 Justin C Mandeville and Philip Harrington 2.5.4 Management of Acute 	Jade A Loughran and Sarah F Bell 2.6.5 Labour Analgesia 367 Shakira Nathoo 2.6.6 Placenta Praevia 370 Shakira Nathoo 2.6.7 Grown-up Congenital Heart
	 2.5.3 Subarachnoid Haemorrhage 303 Justin C Mandeville and Philip Harrington 2.5.4 Management of Acute Spinal Cord Injury 307 	Jade A Loughran and Sarah F Bell 2.6.5 Labour Analgesia 367 Shakira Nathoo 2.6.6 Placenta Praevia 370 Shakira Nathoo 2.6.7 Grown-up Congenital Heart Disease (GUCHD) in Pregnancy
	 2.5.3 Subarachnoid Haemorrhage 303 Justin C Mandeville and Philip Harrington 2.5.4 Management of Acute Spinal Cord Injury 307 Carl J Morris and Robert Penders 	Jade A Loughran and Sarah F Bell 2.6.5 Labour Analgesia 367 Shakira Nathoo 2.6.6 Placenta Praevia 370 Shakira Nathoo 2.6.7 Grown-up Congenital Heart Disease (GUCHD) in Pregnancy and Labour 372
	 2.5.3 Subarachnoid Haemorrhage 303 Justin C Mandeville and Philip Harrington 2.5.4 Management of Acute Spinal Cord Injury 307 	Jade A Loughran and Sarah F Bell 2.6.5 Labour Analgesia 367 Shakira Nathoo 2.6.6 Placenta Praevia 370 Shakira Nathoo 2.6.7 Grown-up Congenital Heart Disease (GUCHD) in Pregnancy and Labour 372 Eluned Fisher
	 2.5.3 Subarachnoid Haemorrhage 303 Justin C Mandeville and Philip Harrington 2.5.4 Management of Acute Spinal Cord Injury 307 Carl J Morris and Robert Penders 2.5.5 Late Management of Spinal 	Jade A Loughran and Sarah F Bell 2.6.5 Labour Analgesia 367 Shakira Nathoo 2.6.6 Placenta Praevia 370 Shakira Nathoo 2.6.7 Grown-up Congenital Heart Disease (GUCHD) in Pregnancy and Labour 372 Eluned Fisher 2.6.8 Amniotic Fluid Embolism
	 2.5.3 Subarachnoid Haemorrhage 303 Justin C Mandeville and Philip Harrington 2.5.4 Management of Acute Spinal Cord Injury 307 Carl J Morris and Robert Penders 2.5.5 Late Management of Spinal Cord Injury 311 	Jade A Loughran and Sarah F Bell 2.6.5 Labour Analgesia 367 Shakira Nathoo 2.6.6 Placenta Praevia 370 Shakira Nathoo 2.6.7 Grown-up Congenital Heart Disease (GUCHD) in Pregnancy and Labour 372 Eluned Fisher 2.6.8 Amniotic Fluid Embolism and Postpartum
	 2.5.3 Subarachnoid Haemorrhage 303 Justin C Mandeville and Philip Harrington 2.5.4 Management of Acute Spinal Cord Injury 307 Carl J Morris and Robert Penders 2.5.5 Late Management of Spinal Cord Injury 311 Carl J Morris and Robert Penders 	Jade A Loughran and Sarah F Bell 2.6.5 Labour Analgesia 367 Shakira Nathoo 2.6.6 Placenta Praevia 370 Shakira Nathoo 2.6.7 Grown-up Congenital Heart Disease (GUCHD) in Pregnancy and Labour 372 Eluned Fisher 2.6.8 Amniotic Fluid Embolism

Contents

ix

x Contents

2.7 Ophthalmic 382 2.7.1 Orbital Anatomy 382 Sethina Watson 2.7.2 Control of Intraocular Pressure 388 Sethina Watson 2.7.3 Penetrating Eye Injury 391 Jade A Loughran and Sarah F Bell 2.7.4 Cataract and Detached Retina 396 Alice Braga 2.7.5 Strabismus 399 Joy M Sanders and Zoe Riddell 2.7.6 Ophthalmology Local Anaesthetic Techniques 401 Charlotte Morris 2.8 **Orthopaedic** 405 2.8.1 Procedures under Tourniquet, Reperfusion Injury and Antioxidants 405 Matthew J Aldridge 2.8.2 Major Trauma, Hospital Triage and Scoring Systems 409 Anandh Balu 2.8.3 Blood Conservation Strategies 411 Niladri Das 2.8.4 Bone Cement Implantation Syndrome 415 Joseph Swani 2.8.5 Management of Hip Fractures 418 Daniel El-Dalil Paediatric 423 2.9

2.9.1 Principles of Neonatal Physiology 423 Helen L Jewitt

2.9.2 Neonatal Resuscitation and the Effects of Prematurity **426**

Helen L Jewitt 2.9.3 Anaesthesia in Infancy and Childhood 429 Jade A Loughran and Sarah F Bell 2.9.4 Pyloric Stenosis 435 Penelope S Colter, Sarah F Bell and Caroline SG Janes 2.9.5 Intussusception 440 Penelope S Colter, Sarah F Bell and Caroline SG Janes 2.9.6 Oesophageal Atresia, Diaphragmatic Hernia and Exomphalos 444 Helen L Jewitt 2.9.7 Child Protection and Nonaccidental Injury 448 Nicholas Marsden

2.10 Perioperative Medicine 453
2.10.1 Cardiopulmonary Exercise Testing 453
Niladri Das
2.10.2 Preoperative Assessment and Prehabilitation 456
Joseph Swani
2.10.3 Anaesthetic Considerations

for Cancer Surgery 460 Matthew Townsend 2.10.4 Anaesthesia for the Elderly 465 Joseph Swani

2.11 Vascular 473 2.11.1 Abdominal Aortic Aneurysm Repair 473 Jessie R Welbourne and Kate Palmer 2.11.2 Anaesthesia for Carotid Endarterectomy 477 Will H Spencer, Emily K Johnson and Jessie R Welbourne 2.11.3 Anaesthesia for Lower Limb Peripheral Arterial Surgery 486 Gary Thomas 2.11.4 Interventional Radiology 491 James Harrison

Section 3 Emergency Medicine and Intensive Care

3.1 Emergency Medicine 497 3.1.1 Acute Poisoning 497 Ami Jones

Contents xi 3.1.2 Burns, Electrocution 4.1.5 Cranial Nerve Anatomy 569 and Drowning 501 Poonam M Bopanna Helen L Jewitt, Philip Harrington 4.1.6 Anatomy of the and Stephanie Wallis Intrathecal Space 573 Alexandra K Freeman 3.2 Intensive Care 508 4.1.7 Trunk Blocks 575 3.2.1 The High-Risk Farzad Saadat and Sarah F Bell Surgical Patient 508 Matt Thomas 4.2 Regional Anaesthesia 581 3.2.2 Management of Multiorgan Failure 4.2.1 Brachial Plexus, Interscalene and Scoring Systems in the and Axillary Blocks 581 Critically III 513 Pascal J Boddy and Laura A Beard Matt Thomas and Philip Harrington 4.2.2 Stellate Ganglion and Coeliac 3.2.3 ARDS and Ventilation Plexus Blocks 588 Difficulties 520 Rosie Trumper and Matt Thomas Jonathan J Gatward 3.2.4 The Management of Sepsis 527 4.2.3 Ulnar, Median and Radial Daniel El-Dalil, Charlotte Morris and Nerve Blocks 594 Gareth J Gibbon Poonam M Bopanna and 3.2.5 Oxygen Toxicity 530 Laura A Beard Will H Spencer, Emily K Johnson and 4.2.4 Caudal Block 595 Jessie R Welbourne Corinna J Hughes and Philip 3.2.6 Renal Replacement Harrington Therapies 536 4.2.5 Ankle and Knee Blocks 599 Emily K Johnson and Antonia Stone Matthew P Morgan and Andrew 3.2.7 Organ Donation 545 Weir Philip Harrington 4.2.6 Lumbar Plexus, Femoral and 3.2.8 COVID-19 Sciatic Nerve Blocks 602 548 Philip Harrington Rosie Trumper and Jonathan J Gatward 4.2.7 Local Anaesthetic Section 4 Anatomy and Toxicity 610 **Regional Anaesthesia** Andrew P Georgiou 4.1 Anatomy 552 4.3 Pain 616 4.1.1 Anatomy of Central Venous 4.3.1 Pain Pathways 616 Access 552 Michael B Clarke Catherine Challifour 4.3.2 Neuropathic Pain including 4.1.2 Anatomy of the Extradural Space Complex Regional Pain Syndrome, and Spinal Cord Blood Supply 556 Trigeminal Neuralgia and Matthew J Aldridge Post-herpetic Neuralgia 621 4.1.3 Anatomy of the Trachea Shelley Barnes and Sarah Love-Jones and Bronchi 560 4.3.3 Low Back Pain 627 Nirav D Patel and Mari H Roberts Murli Krishna and Kat Ng 4.1.4 The Anatomy of the Autonomic 4.3.4 Assessment of Acute and Nervous System 565 Chronic Pain 633 Charlotte Morris, Daniel El-Dalil and Shelley Barnes, Sarah Love-Jones and Gareth J Gibbon Santhosh Gopalakrishnan

ii Contents	
4.3.5 Analgesic Techniques 636 Michael B Clarke	5.2 Ethics and Consent 647 Ruth Doolin
Section 5 Miscellaneous	5.3 Critical Incidents 651 Ruth Doolin
5.1 Environmentally Sustainable Anaesthesia 642 Rebecca Taylor-Smith and Paul Southall	Index 654

Contributors to the First Edition

Sarah F Bell Speciality Registrar in Anaesthesia Wales Deanery, Cardiff, Wales, UK

Andrea Binks Specialist Registrar in Anaesthesia Severn Deanery, Bristol, UK

Pascal J Boddy Specialist Registrar in Anaesthesia Leicester Deanery, Leicester, UK

Poonam M Bopanna Specialist Registrar in Anaesthesia Wales Deanery, Cardiff, Wales, UK

Alison J Brewer Specialist Registrar in Anaesthesia Leicester Deanery, Leicester, UK

Michael B Clarke Specialist Registrar in Anaesthesia West Midlands Deanery, Birmingham, UK

William A English Consultant in Anaesthesia and Intensive Care Medicine Royal Cornwall Hospital, Cornwall, UK

Jonathan J Gatward Specialist Registrar in Intensive Care Medicine Royal North Shore Hospital, Sydney, Australia

Andrew P Georgiou Specialist Registrar in Anaesthesia Severn Deanery, Bristol, UK Gareth J Gibbon

Locum Consultant in Anaesthesia and Intensive Care Medicine Musgrove Park Hospital, Taunton, UK

Santhosh Gopalakrishnan Specialist Registrar in Anaesthesia West Midlands Deanery, Birmingham, UK

James D Griffin Consultant in Anaesthesia Torbay Hospital, Devon, UK

Katherine A Holmes Specialist Registrar in Anaesthesia SouthWest Peninsula Deanery, Plymouth, UK

Catherina Hoyer Specialist Registrar in Anaesthesia Severn Deanery, Bristol, UK

Corinna J Hughes Specialist Registrar in Anaesthesia Oxford Deanery, Oxford, UK

Asim Iqbal Specialist Registrar in Anaesthesia West Midlands Deanery, Birmingham, UK

Caroline SG Janes Specialist Registrar in Anaesthesia Oxford Deanery, Oxford, UK

Helen L Jewitt Specialist Registrar in Anaesthesia Wales Deanery, Cardiff, Wales, UK

Emily K Johnson Specialty Registrar in Anaesthesia West Midlands Deanery, Birmingham, UK

xiii

Cambridge University Press & Assessment 978-1-009-26746-5 — Dr Podcast Scripts for the Final FRCA Edited by Rebecca Leslie , Emily Johnson , Gary Thomas , Philip Harrington Frontmatter More Information

xiv

Contributors to the First Edition

Ami Jones

Specialist Registrar in Anaesthesia and Intensive Care Medicine Wales Deanery, Cardiff, Wales, UK

Dana L Kelly Specialty Registrar in Anaesthesia Oxford Deanery, Oxford, UK

Murli Krishna Consultant in Anaesthesia and Pain Medicine Frenchay Hospital, Bristol, UK

Rebecca A Leslie Specialty Registrar in Anaesthesia Severn Deanery, Bristol, UK

Sarah J Love-Jones Consultant in Anaesthesia and Pain Medicine Frenchay Hospital, Bristol, UK

Justin C Mandeville Specialist Registrar in Anaesthesia and Intensive Care Oxford Deanery, Oxford, UK

Imran Mohammad Specialist Registrar in Anaesthesia Oxford Deanery, Oxford, UK

Matthew P Morgan Specialist Registrar in Anaesthesia Wales Deanery, Cardiff, Wales, UK

Carl J Morris Specialist Registrar in Anaesthesia Oxford Deanery, Oxford, UK Neil J Rasburn

Specialist Registrar in Anaesthesia Severn Deanery, Bristol, UK

Mari H Roberts Specialist Registrar in Anaesthesia Wales Deanery, Cardiff, Wales, UK

Joy M Sanders Specialty Registrar in Anaesthesia Wessex Deanery, Winchester, UK

Richard LI Skone Specialist Registrar in Anaesthesia and PICU West Midlands Deanery, Bristol, UK

Amy K Swinson Specialist Registrar in Anaesthesia London Deanery, London, UK

Matthew JC Thomas Consultant in Anaesthesia and Intensive Care Bristol Royal Infirmary, Bristol, UK

Susanna T Walker Specialist Registrar in Anaesthesia London Deanery, London, UK

Jessie R Welbourne Specialist Registrar in Anaesthesia Leicester Deanery, Leicester, UK

Timothy JB Wood Specialist Registrar in Anaesthesia Wales Deanery, Cardiff, Wales, UK

Contributors

Matthew J Aldridge

Specialty Trainee Anaesthesia and Honorary Clinical Lecturer Royal United Hospitals NHS Foundation Trust; University of Bristol, Bristol, UK

Anandh Balu

Specialty Registrar in Anaesthesia and Intensive Care Medicine West Midlands Deanery, Birmingham, UK

Shelley Barnes Consultant in Anaesthesia and Chronic Pain Medicine North Bristol NHS Trust, Bristol, UK

Laura A Beard Anaesthetic Consultant Gloucestershire Hospitals NHS Foundation Trust, Gloucester, UK

Sarah F Bell

Consultant Anaesthetist Cardiff and Vale University Local Health Board, Cardiff, UK

Andrea Binks Specialist Anaesthetist Wollongong Public Hospital, Wollongong, NSW, Australia

Pascal J Boddy Specialist Registrar in Anaesthesia Leicester Deanery, Leicester, UK

Poonam M Bopanna Consultant Anaesthetist Aneurin Bevan Local Health Board, Newport, UK

Alice Braga

Consultant in Anaesthesia Worcestershire Acute Hospitals NHS Trust, UK

Alison J Brewer

Consultant Anaesthetist University Hospitals of Derby and Burton NHS Foundation Trust, Derby, UK

Catherine Challifour

ST6 in Anaesthesia and Intensive Care Medicine Royal United Hospital, Bath, UK

Michael B Clarke

Consultant in Anaesthesia Worcestershire Acute Hospitals NHS Trust, UK

Penelope S Colter

Anaesthetic Registrar Children's Hospital for Wales, Cardiff, UK

Niladri Das

Consultant in Anaesthesia Worcestershire Royal Hospital, Worcester, UK

Ashley C Davis

Anaesthesia Provisional Fellow ANZCA The Wollongong Hospital, Wollongong, NSW, Australia

Ruth Doolin ST5 Anaesthetist Birmingham School of Anaesthesia, Birmingham, UK

Cambridge University Press & Assessment 978-1-009-26746-5 — Dr Podcast Scripts for the Final FRCA Edited by Rebecca Leslie , Emily Johnson , Gary Thomas , Philip Harrington Frontmatter More Information

xvi

List of Contributors

Daniel El-Dalil Nottingham University Hospital Trust, Nottingham, UK

Amin Elkhawad

Specialist Registrar in Anaesthesia Cardiff and Vale University Health Board, Cardiff, UK

William A English

Consultant Anaesthetics and Intensive Care Royal Cornwall Hospitals NHS Trust, Truro, UK

Eluned Fisher

Department of Anaesthesia, Aneurin Bevan University Health Board, Newport, UK

Luke Foster

Anaesthetic Registrar Dunedin Public Hospital, Dunedin, New Zealand

Alexandra K Freeman

ST5 Anaesthetics Worcestershire Royal Hospital, Worcester, UK

Jonathan J Gatward

Senior Staff Specialist and Clinical Lecturer Intensive Care, Royal North Shore Hospital; Sydney Medical School, University of Sydney, Sydney, Australia

Andrew P Georgiou

Consultant in Anaesthesia and Intensive Care Medicine; Consultant in Critical Care Transfer; Clinical Director Royal United Hospital, Bath; Retrieve; South West Critical Care Network, Bristol, UK

Gareth J Gibbon

Locum Consultant in Anaesthesia and Intensive Care Medicine Musgrove Park Hospital, Taunton, UK

Santhosh Gopalakrishnan

Consultant Anaesthetist

Philip Harrington

Specialist Registrar in Anaesthetics and Intensive Care Medicine West Midlands Deanery, Birmingham, UK

James Harrison

Specialist Registrar in Anaesthetics and Intensive Care Medicine West Midlands Deanery, Birmingham, UK

Sophia Henderson

Post CCT Fellow in ICM and Palliative Care Royal United Hospital, Bath, UK

Benjamin Hofland-Ward

Chief Sustainability Officer's Clinical Fellow 2021–22 West Midlands Green Anaesthesia and Intensive Care Network Lead (GAIN-WM), UK

Corinna J Hughes

Consultant Anaesthetist Oxford University Hospitals NHS Trust, Oxford, UK

Asim Iqbal

Department of Anesthesiology and Perioperative Care, Vancouver General Hospital; University of British Columbia Hospital, Vancouver, British Columbia, Canada

Rosada Jackson

ST5 Anaesthesia University Hospitals Plymouth NHS Trust, Plymouth, UK

Caroline SG Janes

Consultant in Anaesthesia Gloucestershire Hospitals NHS Foundation Trust, Gloucester, UK

Cambridge University Press & Assessment 978-1-009-26746-5 — Dr Podcast Scripts for the Final FRCA Edited by Rebecca Leslie , Emily Johnson , Gary Thomas , Philip Harrington Frontmatter <u>More Information</u>

List of Contributors

xvii

Helen L Jewitt Consultant Anaesthetist Aneurin Bevan Local Health Board, Newport, UK

Emily K Johnson Consultant Anaesthetist Worcester Acute Hospitals NHS Trust, UK

Ami Jones Consultant Anaesthetist Aneurin Bevan Local Health Board, Newport, UK

Dana L Kelly Specialty Registrar in Anaesthesia Oxford Deanery, Oxford, UK

Murli Krishna Consultant Anaesthetist North Bristol NHS Trust, Bristol, UK

Kate Leaper Advanced Trainee Anaesthesia and Pain Management, Royal North Shore Hospital, Sydney, NSW, Australia

Jade A Loughran Anaesthetic Registrar Department of Anaesthetics, University Hospital of Wales, Cardiff, UK

Sarah Love-Jones Consultant in Anaesthesia and Chronic Pain Southmead Hospital, North Bristol Trust, Bristol, UK

Justin C Mandeville Consultant Anaesthetics and Intensive Care Buckinghamshire Healthcare NHS Trust, UK Nicholas Marsden Specialist Registrar in Anaesthesia

West Midlands Deanery, Birmingham, UK

Alexander Midgley-Hunt Consultant in Anaesthesia Dudley Group NHS Foundation Trust, Dudley, UK

Imran Mohammad Specialist Registrar in Anaesthesia Oxford Deanery, Oxford, UK

Steffan Morgan Anaesthetic Speciality Trainee Wales Deanery, Cardiff, UK

Carl J Morris Specialist Registrar in Anaesthesia Oxford Deanery, Oxford, UK

Charlotte Morris Anaesthetist Queens Medical Centre Nottingham, Nottingham, UK

Shakira Nathoo Specialist Registrar in Anaesthesia West Midlands Deanery, Birmingham, UK

Kat Ng Consultant in Anaesthetics and Pain Medicine North Bristol NHS Trust, Bristol, UK

Kate Palmer Special Registrar in Anaesthesia Royal Devon University Healthcare NHS Foundation Trust, UK

Nirav D Patel Specialist Registrar in Anaesthesia Wales Deanery, Cardiff, UK

Cambridge University Press & Assessment 978-1-009-26746-5 — Dr Podcast Scripts for the Final FRCA Edited by Rebecca Leslie , Emily Johnson , Gary Thomas , Philip Harrington Frontmatter More Information

xviii

List of Contributors

James W Pearlman Advanced Trainee; Clinical Associate Lecturer Intensive Care, Royal North Shore Hospital; Sydney Medical School, University of Sydney, Sydney, Australia

Stephen Pearson

Specialist Registrar in Anaesthesia and Intensive Care Medicine West Midlands Deanery, Birmingham, UK

Robert Penders Specialty Trainee in Anaesthesia Royal United Hospital, Bath, UK

Zoe Riddell Anaesthetics Registrar Birmingham School of Anaesthesia, Birmingham, UK

Mari H Roberts

Consultant Anaesthetist Cardiff and Vale University Local Health Board, Cardiff, UK

Farzad Saadat Anaesthetic Consultant St George's Hospital, London, UK

Joy M Sanders Specialty Registrar in Anaesthesia Wessex Deanery, Winchester, UK

Michael John Scerri

Department of Anaesthesia, Shoalhaven District Memorial Hospital, Nowra; Department of Anaesthesia, Wollongong Private Hospital, Wollongong; Graduate School of Medicine, University of Wollongong, Wollongong, NSW, Australia

Richard LI Skone Consultant Anaesthetist Cardiff and Vale University Local Health Board, Cardiff, UK

Katharine Smurthwaite

ST5 in Anaesthesia and Intensive Care Medicine Torbay and South Devon NHS Foundation Trust, Torquay, UK

Paul Southall

Consultant Anaesthetist Worcestershire Acute Hospitals NHS Trust, UK

Will H Spencer

Anaesthesia ST6 Royal Devon University Healthcare NHS Foundation Trust, UK

Antonia Stone

Clinical Fellow, Worcester Acute Hospitals NHS Trust, UK

Joseph Swani

Anaesthetic Registrar Worcestershire Acute Hospitals NHS Trust, UK

Rebecca Taylor-Smith

Consultant Anaesthetist, Wye Valley NHS Trust, UK

Gary Thomas

Consultant Anaesthetist (Retired) Princess of Wales Hospital, Cwm Taf Morgannwg University Health Board, Bridgend, UK

Matthew JC Thomas

Consultant in Intensive Care Medicine North Bristol NHS Trust, Bristol, UK

Matthew Townsend

Anaesthetic Registrar Gloucestershire Royal Hospitals NHS Trust, Gloucester, UK

Rosie Trumper Advanced Trainee Anaesthesia and Pain Management, Royal North Shore Hospital, Sydney, Australia

Cambridge University Press & Assessment 978-1-009-26746-5 — Dr Podcast Scripts for the Final FRCA Edited by Rebecca Leslie , Emily Johnson , Gary Thomas , Philip Harrington Frontmatter More Information

List of Contributors

xix

Prakash Vadukul

Specialist Registrar in Anaesthetics and Intensive Care Medicine West Midlands Deanery, Birmingham, UK

Menanta van Velze

Speciality Trainee in Anaesthesia Birmingham School of Anaesthesia, Birmingham, UK

Susanna T Walker

Consultant Anaesthetist The Royal Marsden NHS Foundation Trust, London, UK

Stephanie Wallis

University Hospitals Bristol NHS Foundation Trust, Bristol, UK

Sethina Watson

Anaesthetic Registrar Severn Deanery, Bristol, UK

Andrew Weir

Specialty Registrar in Anaesthesia West Midlands Deanery, Birmingham, UK

Jessie R Welbourne

Consultant in Intensive Care Medicine University Hospitals Plymouth NHT Trust, Plymouth, UK

Lucinda Williams

Consultant in Anaesthesia Worcestershire Acute Hospitals NHS Trust, UK

Timothy JB Wood

Specialist Registrar in Anaesthesia Wales Deanery, Cardiff, Wales, UK

Preface

The second edition of this book has been written entirely by either post-fellowship trainees or recently appointed consultants in anaesthesia and it is intended that it should complement the ever-popular Dr Podcasts. The authors have all had recent experience of anaesthetic examinations or have examining experience and were best placed to write about their areas of interest in an exam-orientated, concise and relevant manner.

The subject areas mirror those of the podcasts and it is hoped that the contents of the book will prove invaluable for candidates preparing for the Final FRCA examinations. The book can either be read in conjunction with the podcasts, or used as a separate resource to aid revision.

The format is built along the lines of a structured oral examination (SOE) and elements of it reflect the composition of model answers to the constructed response questions (CRQs). Key components of the Royal College of Anaesthetists syllabus have been selected for podcasting and publication because they feature regularly in the exam.

Additional topics have been introduced to cover more areas of the syllabus and reflect changes or advances in practice since the publication of the first edition.