

Obstetric and Intrapartum Emergencies

Obstetric and Intrapartum Emergencies

A Practical Guide to Management

Second Edition

Edited by

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CAMBRIDGE
UNIVERSITY PRESS

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University Printing House, Cambridge CB2 8BS, 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

79 Anson Road, #06–04/06, Singapore 079906

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of
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www.cambridge.org

Information on this title: www.cambridge.org/9781108790932

DOI: 10.1017/9781108807746

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First published 2012

Second edition 2021

Printed in the United Kingdom by TJ Books Limited, Padstow Cornwall

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

Library of Congress Cataloging-in-Publication Data

Names: Chandraharan, Edwin, editor. | Arulkumaran, Sabaratnam, editor.

Title: Obstetric and intrapartum emergencies : a practical guide to management /
edited by Edwin Chandraharan, Sir Sabaratnam Arulkumaran.

Description: Second edition. | Cambridge ; New York, NY : Cambridge University Press, 2021. |

Includes bibliographical references and index.

Identifiers: LCCN 2020047396 (print) | LCCN 2020047397 (ebook) |

ISBN 9781108790932 (paperback) | ISBN 9781108807746 (ebook)

Subjects: MESH: Pregnancy Complications – therapy | Delivery, Obstetric – methods |

Emergency Treatment – methods | Emergencies | Obstetrics – methods

Classification: LCC RG571 (print) | LCC RG571 (ebook) | NLM WQ 240 | DDC 618.3–dc23

LC record available at <https://lcn.loc.gov/2020047396>

LC ebook record available at <https://lcn.loc.gov/2020047397>

ISBN 978-1-108-79093-2 Paperback

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Contents

List of Contributors viii
Preface: Why a Second Edition? xiii
Preface to the First Edition xv
Acknowledgements xvi

Section 1 General Principles

1	Anatomical and Physiological Changes in Pregnancy: Impact on Emergency Care 1
	Niraj Yanamandra and Edwin Chandraharan
2	Principles of Resuscitation for ‘Maternal Collapse’ During Pregnancy, Labour and Postpartum: Airway, Breathing and Circulation 10
	Renate Wendler
Section 2 Algorithms for Management of the Top Five ‘Direct Killers’	
3	Management of Deep-Vein Thrombosis and Pulmonary Embolism: Antepartum, Intrapartum and Postpartum 17
	Chu Chin Lim and Tahir A. Mahmood
4	Management of Severe Preeclampsia and Eclampsia: Antepartum, Intrapartum and Postpartum 26
	Peter von Dadelszen and Laura A. Magee
5	Management of Massive Obstetric Haemorrhage: Antepartum, Intrapartum and Postpartum 35
	Ana Pinas Carillo and Edwin Chandraharan
6	Management of Septicaemia and Septic Shock: Antepartum, Intrapartum and Postpartum 43
	Karin Leslie and Sarah Hammond
7	Management of Amniotic Fluid Embolism 47
	Derek Tuffnell, James Tibbott and Hlupekile Chipeta

Section 3 Intrapartum Emergencies

8	Uterine Rupture 51
	Caroline Reis Gonçalves and Edwin Chandraharan
9	Breech Delivery 56
	Enaya Mirza and Edwin Chandraharan
10	Umbilical Cord Prolapse 66
	Malik Goonewardene
11	Fetal Compromise: Diagnosis and Management 76
	Anna Gracia Perez-Bonfils and Edwin Chandraharan
12	Shoulder Dystocia: Diagnosis and Management 86
	Edwin Chandraharan and Sabaratnam Arulkumaran
13	Twin Delivery 92
	Deepal S. Weerasekera
14	Instrumental Vaginal Delivery 98
	Vikram Sinai Talaulikar and Sabaratnam Arulkumaran
15	‘Crash’ Caesarean Section 107
	Leonie Penna
16	Unintended Trauma and Complications During Caesarean Section 116
	Suganya Sukumaran and Edwin Chandraharan
17	Obstetric Emergencies in Midwife-Led Settings 120
	Emma Spillane

Contents

Section 4 Postpartum Emergencies

- 18 **Acute Puerperal Uterine Inversion** 133
 Hemantha Senanayake, Probhodana
 Ranaweera and Mohamed Rishard
- 19 **Sudden Postpartum Maternal Collapse** 139
 Becky Liu and Amarnath Bhide
- 20 **Retained Placenta** 147
 Kapila Gunawardane and Chathura
 Ratnayake
- 21 **Perineal Trauma** 153
 Stergios K. Doumouchtsis and Vasilios
 Pergialiotis

**Section 5 Medical and Surgical
 Emergencies During Pregnancy**

- 22 **Palpitations During Pregnancy** 159
 Sourav Das and Edwin Chandrachan
- 23 **Breathlessness in Pregnancy** 164
 Amanda Ali and Hassan Shehata
- 24 **Abdominal Pain in Pregnancy** 168
 Archana Krishna and Edwin
 Chandrachan
- 25 **Blurring of Vision and Sudden Loss of Vision
 in Pregnancy** 178
 Anomi Panditharatne and Edwin
 Chandrachan
- 26 **Psychiatric Emergencies** 185
 Lorraine Cleghorn
- 27 **Drug Overdose in Pregnancy** 191
 Lakshman Karalliedde
- 28 **Diabetic Ketoacidosis in Pregnancy** 200
 Dagmar Krueger and Ayona Wijemanne
- 29 **Convulsions and Epilepsy** 207
 Ingrid Watt-Coote
- 30 **Musculoskeletal Considerations in
 Pregnancy** 214
 Hiran Amarasekera
- 31 **Endocrine Emergencies in Pregnancy** 221
 Madhushree Ghosh and Manilka
 Sumanatilleke

**Section 6 Anaesthetic Emergencies
 During Pregnancy**

Section Editors: *Anthony Addei and
 Rehana Iqbal*

- 32 **General Anaesthesia and Failed
 Intubation** 231
 Matthew Evans, Sarah Hammond and
 Christina Wood
- 33 **Fluid Overload and Underload** 239
 Renate Wendler
- 34 **Transfusion and Anaphylactic and Adverse
 Drug Reactions in Pregnancy** 245
 Saba Al-Sulttan, Sohail Bampoe and
 Anthony Addei
- 35 **Major Trauma, Including Road Traffic
 Accidents** 252
 Kirsty Crocker and Tim Patel

**Section 7 Neonatal Emergencies and
 the Management of Immediate
 Neonatal Problems**

- 36 **Resuscitation of the Newborn** 261
 Sadaf Bhayat, Louise Davidson, Siromi
 Gunaratne and Nigel Kennea

**Section 8 Management of Anticipated
 and Non-anticipated Emergencies in
 Pregnancy**

- 37 **Placenta Accreta Spectrum Disorders
 (Abnormal Invasion of the Placenta)** 273
 Ana Pinas Carrillo, Richard Hartopp and
 Edwin Chandrachan
- 38 **Peri- and Postmortem Caesarean
 Section** 279
 Priyantha Kandaneerachchi, Sunali
 Kandaneerachchi and Edwin
 Chandrachan
- 39 **Management of Established Preterm Labour
 and Rescue Cerclage** 283
 Leo Gurney, Gareth Waring and
 Vedrana Caric

- | | |
|--|--|
| <p>40 Failed Operative Vaginal Delivery: Minimising Maternal and Fetal Morbidity 292
Naheed Tahir and Edwin Chandraharan</p> <p>Section 9 Setting-Up Skills and Drills Training in Maternity Services and Reducing Avoidable Harm</p> <p>Section Editor: <i>Susana Pereira</i></p> <p>41 Addressing Human Factors in Obstetric Emergencies 297
Susana Pereira and Kim Hinshaw</p> <p>42 Setting Up and Running Labour Ward Fire Drills 307
Jia Yan-Ju and Edwin Chandraharan</p> | <p>43 Simulation Training for Obstetric Emergencies 311
Polly Hughes</p> <p>44 Learning from Mothers and Babies: Reducing Risk Through Audits and Confidential Enquiries and 'Each Baby Counts' Reports 315
Susana Pereira and Edwin Chandraharan</p> <p>45 Risk Management: Emergency Obstetric and Intrapartum Care 320
Jessica Moore</p> <hr/> <p><i>Index</i> 327</p> |
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Preface

Why a Second Edition?

Recent confidential enquiries into maternal deaths in the United Kingdom (MBBRACE, 2017) have concluded that deaths due to obstetric haemorrhage have nearly doubled during the past triennium. The latest 'Each Baby Counts' Report by the Royal College of Obstetricians & Gynaecologists (October 2017) has noted that approximately 76% of perinatal deaths and brain injuries could have been avoided by an alternative management. Lack of knowledge and human factors were the main contributory factors to poor outcomes. In addition, the National Maternal and Perinatal Audit Report in the UK (2017) has highlighted significant variation in maternal and perinatal outcomes, even in a 'well-resourced' setting.

Pregnancy and childbirth should be a safe and rewarding experience for women and their families, as well as for maternity healthcare providers. However, it is estimated that globally more than 300 000 women die during pregnancy and childbirth every year, and sadly, substandard care continues to contribute to a significant proportion of these deaths, even in the United Kingdom. Substandard care is often due to 'too little being done too late', especially while managing emergencies during antepartum, intrapartum and postpartum periods. Failure to recognise warning symptoms and signs of complications, lack of knowledge and skills, failure to seek appropriate experienced or multidisciplinary input, failures in team working and ineffective communication contribute to maternal and perinatal morbidity and mortality.

The book aims to promote evidence-based emergency obstetric and neonatal care both in well-resourced and less well-resourced countries. We have attempted to include 'practical algorithms' for quick reference, a scientific basis for proposed actions for obstetric and intrapartum emergencies and illustrations, where appropriate. In recognition of the fact that more than 90% of women die in less well-resourced countries with limited resources, we have

included a section on suggested management in low-resource settings. In addition, 'Key Facts', 'Pearls' and 'Pitfalls' are included for easy reference.

In response to recent reports, we have added a new section on Human Factors edited by Dr Susana Pereira. We have added new chapters on emergencies during home births. In view of recent negative media reports regarding fetal trauma (skull fractures) and deaths during second-stage caesarean sections, as well as NHS Resolution Report in September 2019 highlighting 'difficult delivery of the fetal head during caesarean section' as an important cause of neonatal admission in the United Kingdom, we have added a new chapter on failed operative vaginal births.

We are greatly indebted to the authors, who come from diverse backgrounds and experience, for not only sacrificing their time, but also for sharing their wealth of knowledge and expertise. This textbook reflects a collective effort from midwives, trainee obstetricians and gynaecologists, senior obstetricians, anaesthetists, neonatologists, perinatal psychiatrists, toxicologists, physicians and surgeons, from both well-resourced and less well-resourced countries to make pregnancy and childbirth safer for women and their babies. We are indeed delighted and privileged to edit this textbook with contributions from such a diverse group of authors that truly reflect the multi-professional and multidisciplinary care that every woman and her baby fully deserve during pregnancy and childbirth.

We have attempted to structure the sections for easy reference, starting with anatomical and physiological changes during pregnancy and their implications for clinical practice, followed by algorithms for the management of the 'top five killers'. In addition to common antepartum, intrapartum and postpartum emergencies, we have also included management of uncommon but potentially life-threatening emergencies such as drug overdose, road traffic accidents and endocrine and musculoskeletal emergencies.

Preface

We wish to thank our Section Editors for Anaesthetic Emergencies, Drs Anthony Addei and Rehana Iqbal for ensuring that common anaesthetic emergencies such as failed intubation, fluid underload and overload and transfusion reactions are addressed. Similarly, we thank our Section Editor for Human Factors, Dr Susana Pereira, for her hard work.

The recent Each Baby Counts Report published by the Royal College of Obstetricians and Gynaecologists (RCOG) in March 2020 has concluded that in 72% of babies who were severely brain-damaged or died following an intrapartum hypoxic insult, a different care may have resulted in a different outcome. More recently, the Rapid Report on Learning from SARS-COV-2- related and associated maternal deaths in the United Kingdom from March to May 2020 published by the Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries Across the UK (MBRRACE-UK) has concluded that the care provided to women was extremely variable ([\[u.ox.ac.uk/assets/downloads/mbrance-uk/reports/MBRRACE-UK_Maternal_Report_2020_v10_FINAL.pdf\]\(http://u.ox.ac.uk/assets/downloads/mbrance-uk/reports/MBRRACE-UK_Maternal_Report_2020_v10_FINAL.pdf\)\). Moreover, this report found that not only many women who died had minimal or delayed obstetric or midwifery input, but there was also a lack of senior and/or multidisciplinary approach to care.](http://www.npe</p></div><div data-bbox=)

Effective management of obstetric and intrapartum emergencies involves continuous multidisciplinary training and education. The section 'Setting-Up Skills and Drills in Maternity Services' is aimed at aiding continuously improving care and outcomes for women and their babies.

We hope this textbook will be useful for midwives, medical students, trainee as well as senior obstetricians, anaesthetists and neonatologists both in well-resourced and less well-resourced countries.

Let us work together to ensure that no woman or her baby should die due to substandard care by optimising management of obstetric and intrapartum emergencies.

Preface to the First Edition

Pregnancy and childbirth should be a safe and rewarding experience for women and their families, as well as for maternity healthcare providers. However, it is estimated that globally over 300 000 women die during pregnancy and childbirth every year, largely due to substandard care. Even in the United Kingdom, the latest Confidential Enquiries into Maternal Deaths Report suggests that substandard care may contribute to approximately 70% of all maternal deaths.

Substandard care is often due to 'too little being done too late', especially whilst managing emergencies during antepartum, intrapartum and postpartum periods. Failure to recognise warning symptoms and signs of complications, lack of knowledge and skills, failure to seek appropriate experienced or multi-disciplinary input, as well as failures in team working and effective communication, contribute to maternal and perinatal morbidity and mortality.

The book aims to promote evidence-based emergency obstetric and neonatal care both in well-resourced and less well-resourced countries. We have attempted to include 'practical algorithms' for quick reference, a scientific basis for proposed actions for obstetric and intrapartum emergencies and illustrations, where appropriate. In recognition of the fact that over 90% of women die in less well-resourced countries with limited resources, we have included a section on 'Suggested management in low-resource settings'. In addition, 'Key facts', 'Pearls' and 'Pitfalls' are included for easy reference.

We are greatly indebted to the authors who come from diverse backgrounds and experience, for not only sacrificing their time, but also for sharing their knowledge and expertise. There has been a collective effort from midwives, trainee obstetricians and gynaecologists, senior obstetricians, anaesthetists,

neonatologists, perinatal psychiatrists, toxicologists, physicians and surgeons, from both well-resourced and less well-resourced countries to make pregnancy and childbirth safer for women and their babies. We are indeed delighted to edit this textbook with contributions from such a diverse group of authors that truly reflect the multi-professional and multi-disciplinary care that every pregnant woman and her baby fully deserve.

We have attempted to structure the sections for easy reference, starting with anatomical and physiological changes during pregnancy and their implications on clinical practice, followed by algorithms for the management of the 'Top five killers'. In addition to common antepartum, intrapartum and postpartum emergencies, we have also included management of uncommon but potentially life-threatening emergencies such as drug overdose, road traffic accidents and endocrine and musculoskeletal emergencies.

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We hope this textbook will be useful for midwives, medical students, trainee as well as senior obstetricians, anaesthetists and neonatologists both in the well-resourced and less well-resourced countries.

Let us work together to ensure that no woman or her baby should die due to substandard care by optimising management of obstetric and intrapartum emergencies.

Acknowledgements

We have been very privileged to care for women and their babies during pregnancy and childbirth, and to be part of excellent and cohesive multidisciplinary teams in our careers. Women and babies have taught us the importance of a multidisciplinary team approach to ensure a timely diagnosis and instituting the most appropriate management of obstetric and intrapartum emergencies to optimize outcomes. The editors also would like to sincerely thank each and every author for their generous contribution of their time, knowledge and expertise. We are very grateful to Mr Nick Dunton, Ms Katy

Nardoni, Ms, Camille Lee-Own, Ms Emily Jones and Ms Anna Whiting from Cambridge University Press for their invaluable support and professionalism as well as to Ms Theresa Kornak for copy editing and the team at Integra for production management.

Our immense gratitude goes to our family: Anomi, Ashane and Avindri Chandraharan and Gayatri, Shankari, Nishkantha and Kailash Arulkumaran for their unconditional support, encouragement as well as for their sacrifice, which made this second edition possible.