

Contents

SECTION I

Physiology, 1

Chapter 1

Placental Anatomy and Physiology, 2

Graham J. Burton, Colin P. Sibley, and Eric R.M. Jauniaux

Chapter 2

Fetal Development and Physiology, 26

Michael G. Ross and M. Gore Ervin

Chapter 3

Maternal Physiology, 38

Kathleen M. Antony, Diana A. Racusin, Kjersti Aagaard, and Gary A. Dildy III

Chapter 4

Maternal-Fetal Immunology, 64

Kristina M. Adams Waldorf

Chapter 5

Developmental Origins of Adult Health and Disease, 83

Michael G. Ross and Mina Desai

SECTION II

Prenatal Care, 101

Chapter 6

Preconception and Prenatal Care, 102

Kimberly D. Gregory, Diana E. Ramos, and Eric R.M. Jauniaux

Chapter 7

Nutrition During Pregnancy, 122

Elizabeth Horvitz West, Lisa Hark, and Patrick M. Catalano

Chapter 8

Drugs and Environmental Agents in Pregnancy and Lactation: Teratology, Epidemiology, 136

Jennifer R. Niebyl, Robert J. Weber, and Gerald G. Briggs

Chapter 9

Obstetric Ultrasound: Imaging, Dating, Growth, and Anomaly, 160

Douglas S. Richards

Chapter 10

Genetic Screening and Prenatal Genetic Diagnosis, 193

Deborah A. Driscoll, Joe Leigh Simpson, Wolfgang Holzgreve, and Lucas Otaño

Chapter 11

Antepartum Fetal Evaluation, 219

Mara B. Greenberg and Maurice L. Druzin

SECTION III

Intrapartum Care, 245

Chapter 12

Normal Labor and Delivery, 246

Sarah Kilpatrick and Etoi Garrison

Chapter 13

Abnormal Labor and Induction of Labor, 271

Lili Sheibani and Deborah A. Wing

Chapter 14

Operative Vaginal Delivery, 289

Peter E. Nielsen, Shad H. Deering, and Henry L. Galan

Chapter 15

Intrapartum Fetal Evaluation, 308

David Arthur Miller

Chapter 16

Obstetric Anesthesia, 344

Joy L. Hawkins and Brenda A. Bucklin

Chapter 17

Malpresentations, 368

Susan M. Lanni, Robert Gherman, and Bernard Gonik

Chapter 18

Antepartum and Postpartum Hemorrhage, 395

Karrie E. Francois and Michael R. Foley

Chapter 19

Cesarean Delivery, 425

Vincenzo Berghella, A. Dhanya Mackeen, and Eric R.M. Jauniaux

Chapter 20

Vaginal Birth After Cesarean Delivery, 444

Mark B. Landon and William A. Grobman

Chapter 21

Placenta Accreta, 456

Eric R.M. Jauniaux, Amar Bhide, and Jason D. Wright

SECTION IV**Postpartum Care, 467****Chapter 22**

The Neonate, 468

Paul J. Rozance and Adam A. Rosenberg

Chapter 23

Postpartum Care and Long-Term Health Considerations, 499

Michelle M. Isley and Vern L. Katz

Chapter 24

Lactation and Breastfeeding, 517

Edward R. Newton

SECTION V**Complicated Pregnancy, 549****Chapter 25**

Surgery During Pregnancy, 550

Nadav Schwartz and Jack Ludmir

Chapter 26

Trauma and Related Surgery in Pregnancy, 565

Haywood L. Brown

Chapter 27

Early Pregnancy Loss and Stillbirth, 578

Joe Leigh Simpson and Eric R.M. Jauniaux

Chapter 28

Cervical Insufficiency, 595

Jack Ludmir, John Owen, and Vincenzo Berghella

Chapter 29

Preterm Labor and Birth, 615

Hyagriv N. Simhan, Jay D. Iams, and Roberto Romero

Chapter 30

Premature Rupture of the Membranes, 647

Brian M. Mercer

Chapter 31

Preeclampsia and Hypertensive Disorders, 661

Baha M. Sibai

Chapter 32

Multiple Gestations, 706

Roger B. Newman and Elizabeth Ramsey Unal

Chapter 33

Intrauterine Growth Restriction, 737

Ahmet Alexander Baschat and Henry L. Galan

Chapter 34

Red Cell Alloimmunization, 770

Kenneth J. Moise Jr

Chapter 35

Amniotic Fluid Disorders, 786

William M. Gilbert

SECTION VI**Pregnancy and Coexisting Disease, 795****Chapter 36**

Prolonged and Postterm Pregnancy, 796

Roxane Rampersad and George A. Macones

Chapter 37

Heart Disease in Pregnancy, 803

Jason Deen, Suchitra Chandrasekaran, Karen Stout, and Thomas Easterling

Chapter 38

Respiratory Disease in Pregnancy, 828

Janice E. Whitty and Mitchell P. Dombrowski

Chapter 39

Renal Disease in Pregnancy, 850

David F. Colombo

Chapter 40

Diabetes Mellitus Complicating Pregnancy, 862

Mark B. Landon, Patrick M. Catalano, and Steven G. Gabbe

Chapter 41

Obesity in Pregnancy, 899

Patrick M. Catalano

Chapter 42

Thyroid and Parathyroid Diseases in Pregnancy, 910

Jorge H. Meštman

Chapter 43

Pituitary and Adrenal Disorders in Pregnancy, 938

Mark E. Molitch

Chapter 44

Hematologic Complications of Pregnancy, 947

Philip Samuels

Chapter 45

Thromboembolic Disorders in Pregnancy, 965

Christian M. Pettker and Charles J. Lockwood

Chapter 46

Collagen Vascular Diseases in Pregnancy, 981

Jeanette R. Carpenter and D. Ware Branch

Chapter 47

Hepatic Disorders During Pregnancy, 998

Mitchell S. Cappell

Chapter 48

Gastrointestinal Disorders During Pregnancy, 1012

Mitchell S. Cappell

Chapter 49

Neurologic Disorders in Pregnancy, 1030

Elizabeth E. Gerard and Philip Samuels

Chapter 50

Malignant Diseases and Pregnancy, 1057

Ritu Salani and Larry J. Copeland

Chapter 51

Skin Disease and Pregnancy, 1075

Annie R. Wang and George Kroumpouzou

Chapter 52

Maternal and Perinatal Infection: Chlamydia, Gonorrhea, and Syphilis in Pregnancy, 1089

Jessica L. Nyholm, Kirk D. Ramin, and Daniel V. Landers

Chapter 53

Maternal and Perinatal Infection in Pregnancy: Viral, 1099

Helene B. Bernstein

Chapter 54

Maternal and Perinatal Infection in Pregnancy: Bacterial, 1130

Patrick Duff and Meredith Birsner

Chapter 55

Mental Health and Behavioral Disorders in Pregnancy, 1147

Katherine L. Wisner, Dorothy K.Y. Sit, Debra L. Bogen, Margaret Altemus, Teri B. Pearlstein, Dace S. Svikis, Dawn Misra, and Emily S. Miller

SECTION VII

Legal and Ethical Issues in Perinatology, 1173

Chapter 56

Patient Safety and Quality Measurement in Obstetric Care, 1174

William A. Grobman and Jennifer L. Bailit

Chapter 57

Ethical and Legal Issues in Perinatology, 1183

George J. Annas and Sherman Elias[†]

Chapter 58

Improving Global Maternal Health: Challenges and Opportunities, 1196

Gwyneth Lewis, Lesley Regan, Chelsea Morroni, and Eric R.M. Jauniaux

Appendix I

Normal Values in Pregnancy and Ultrasound Measurements, 1214

Henry L. Galan and Laura Goetzl

Appendix II

Anatomy of the Pelvis, 1224

Steven G. Gabbe

Appendix III

Glossary of Key Abbreviations, 1225

Index, 1231

[†]Deceased.