

Family Medicine Obstetrics

Third Edition

Ratcliffe

Baxley

Cline

Sakornbut

Contents

CHAPTER 1			
<i>Improving Safety and Quality in Maternity Care</i>	1		
<i>Harry A. Taylor, MD, MPH</i>			
CHAPTER 2			
<i>Preconception Care: Improving Birth Outcomes through Care before Pregnancy</i>	10		
<i>Josephine R. Fowler, MD, MS, FAAFP, and Brian W. Jack, MD</i>			
CHAPTER 3			
<i>Content of Prenatal Care</i>	21		
SECTION A History of Prenatal Care	21		
<i>Beth Choby, MD</i>			
SECTION B Diagnosis and Dating of Pregnancy	22		
<i>Beth Choby, MD</i>			
SECTION C Prenatal Visits	24		
<i>Beth Choby, MD</i>			
SECTION D Initial Assessment	28		
<i>Beth Choby, MD</i>			
SECTION E Monitoring the Progress of Pregnancy	33		
<i>Jeffrey D. Quinlan, MD</i>			
SECTION F Screening in Pregnancy and Predictive Value	34		
<i>Jeffrey D. Quinlan, MD, and Matthew K. Cline, MD</i>			
SECTION G Medications in Pregnancy	43		
<i>Kent Petrie, MD</i>			
SECTION H Immunizations in Pregnancy		47	
<i>Cynthia Kilbourn, MD</i>			
SECTION I Complementary and Alternative Medicine in Maternity Care		51	
<i>Kent Petrie, MD</i>			
SECTION J Diagnostic Ultrasound in Pregnancy		59	
<i>Ellen L. Sakornbut, MD, and Mark Deutchman, MD</i>			
CHAPTER 4			
<i>Patient and Family Education</i>		66	
SECTION A Nutrition in Pregnancy and Lactation		66	
<i>Elizabeth G. Baxley, MD, and Rachel Setzler Brown, MD</i>			
SECTION B Educational Preparation for Childbirth, Parenting, and Newborn Care		73	
<i>Ann Tumblin, BA, and Patricia Ann Payne, BSN, CNM, MPH</i>			
SECTION C Preparation for Parenting and Family Issues		78	
<i>Elizabeth G. Baxley, MD, and Jamee H. Lucas, MD, AAFP</i>			
SECTION D Breastfeeding Promotion		79	
<i>Patricia Ann Payne, BSN, CNM, MPH, and Mary Rose Tully, MPH, IBCLC</i>			
SECTION E Physiologic Changes and Common Discomforts of Pregnancy		86	
<i>Elizabeth G. Baxley, MD</i>			

SECTION F Exercise and Pregnancy <i>Elizabeth A. Joy, MD, and Thad J. Barkdull, MD</i>	95	SECTION C Vaginal Bleeding in the Second and Third Trimesters <i>John C. Houchins, MD</i>	165
CHAPTER 5		SECTION D Vaginal Birth after Cesarean <i>Valerie J. King, MD, MPH</i>	169
<i>Pregnancy Interventions</i>	102	SECTION E Small-for-Dates Pregnancy <i>Ellen L. Sakornbut, MD</i>	179
SECTION A Psychosocial Interventions <i>Elizabeth G. Baxley, MD, and Kevin J. Bennett, BS, MS, PhD</i>	102	SECTION F Large-for-Dates Pregnancy Including Macrosomia <i>Thomas J. Gates, MD</i>	186
SECTION B Adolescent Pregnancy Interventions <i>V. Leigh Beasley, MD, FAAFP</i>	107	SECTION G Disorders of Amniotic Fluid Including Oligohydramnios and Polyhydramnios <i>Mark L. Rast, MD</i>	189
SECTION C Substance Abuse in Pregnancy <i>V. Leigh Beasley, MD, FAAFP</i>	112	SECTION H Possible Indicators of Fetal Abnormalities <i>Barbara F. Kelly, MD</i>	192
SECTION D Smoking in Pregnancy <i>Elizabeth G. Baxley, MD</i>	120	CHAPTER 8	
SECTION E Group Prenatal Care: CenteringPregnancy® <i>Kathryn J. Trotter, RN, MSN, CNM, FNP</i>	127	<i>Chronic Medical Conditions in Pregnancy</i>	202
CHAPTER 6		SECTION A Pulmonary Problems in Pregnancy <i>Matthew K. Cline, MD</i>	202
<i>Diagnosis and Management of First-Trimester Complications</i>	130	SECTION B Cardiovascular Conditions <i>Ellen L. Sakornbut, MD</i>	213
SECTION A Diagnosis <i>Mark Deutchman, MD</i>	130	SECTION C Chronic Hypertension <i>Lawrence Leeman, MD, MPH</i>	219
SECTION B Management of Ectopic Pregnancy <i>Mark Deutchman, MD</i>	140	SECTION D Thromboembolic Disease and Chronic Anticoagulation <i>Jeffrey T. Kirchner, DO, FAAFP</i>	223
SECTION C Management of Miscarriage <i>David Turok, MD, MPH</i>	144	SECTION E Hematologic Conditions in Pregnancy <i>Jacqueline E. Julius, MD, and Jeffrey T. Kirchner, DO, FAAFP</i>	227
CHAPTER 7		SECTION F Gastrointestinal Conditions <i>Ellen L. Sakornbut, MD</i>	232
<i>Complications of Pregnancy</i>	151	SECTION G Neurologic Conditions <i>Ellen L. Sakornbut, MD</i>	234
SECTION A Gestational Diabetes Mellitus <i>Richard Beukema, MD, Miranda Raiche, MD, and David Turok, MD, MPH</i>	151		
SECTION B Multiple Gestation <i>Ellen L. Sakornbut, MD</i>	161		

SECTION H Renal Disease	241
<i>Ellen L. Sakornbut, MD</i>	
SECTION I Endocrine Conditions	243
<i>David Turok, MD, MPH,</i> <i>and Ted R. Schultz, MD</i>	
SECTION J Autoimmune Conditions	254
<i>Ellen L. Sakornbut, MD</i>	

CHAPTER 9

Commonly Encountered Medical Problems in Pregnancy

SECTION A Infections in Pregnancy	258
<i>Stephen D. Ratcliffe, MD, MSPH,</i> <i>Rachel Elizabeth Hall, MD, FAAFP,</i> <i>Amity Rubeor, DO,</i> <i>Andrew Coco, MD, MS,</i> <i>and Donna Cohen, MD, MSc</i>	
SECTION B Abdominal Pain and Gastrointestinal Illness	306
<i>Ellen L. Sakornbut, MD</i>	
SECTION C Trauma in Pregnancy	311
<i>Mark Deutchman, MD</i>	
SECTION D Dermatoses of Pregnancy	317
<i>Stephen T. Olin, MD</i>	
SECTION E Acute Neurologic Conditions	321
<i>Ellen L. Sakornbut, MD</i>	
SECTION F Cervical Cytology in Pregnancy	323
<i>Richard Hudspeth, MD</i>	

CHAPTER 10

Treatment of Psychiatric Disorders in Pregnancy

<i>Ellen L. Sakornbut, MD</i>	
SECTION A Affective Disorders	330
SECTION B Anxiety Disorders	336
SECTION C Schizophrenia	337

CHAPTER 11

Antenatal Testing for Fetal Surveillance and Management of the Postterm Pregnancy

SECTION A Overview of Antenatal Testing	339
<i>Stephen D. Ratcliffe, MD, MSPH</i>	
SECTION B Types of Antenatal Testing	341
<i>Stephen D. Ratcliffe, MD, MSPH</i>	
SECTION C Management of the Postterm Pregnancy	348
<i>Richard Hudspeth, MD</i>	

CHAPTER 12

Preterm Labor

SECTION A Risk Factors for Preterm Delivery	352
<i>William Gosnell Sayres, Jr., MD</i>	
SECTION B Antenatal Interventions for Prevention of Preterm Delivery	356
<i>William Gosnell Sayres, Jr., MD</i>	
SECTION C Diagnosis of Preterm Labor	358
<i>William Gosnell Sayres, Jr., MD</i>	
SECTION D Pharmacologic Management of Preterm Labor	361
<i>William Gosnell Sayres, Jr., MD</i>	
SECTION E Incompetent Cervix	366
<i>William Gosnell Sayres, Jr., MD</i>	
SECTION F Management of Preterm Delivery	368
<i>William Gosnell Sayres, Jr., MD</i>	
SECTION G Programs Aimed at Identifying Patients at Risk for Preterm Labor and Subsequent Patient Care	369
<i>Stephen D. Ratcliffe, MD, MSPH</i>	
SECTION H Preterm Premature Rupture of the Membranes	371
<i>William Gosnell Sayres, Jr., MD</i>	
SECTION I Conclusion	374
<i>William Gosnell Sayres, Jr., MD</i>	

CHAPTER 13

Birth Crisis: Caring for the Family Experiencing Perinatal Death or the Birth of a Child with Medical Complications

Elizabeth G. Baxley, MD

CHAPTER 14

Management of Labor

*Kent Petrie, MD,
and Walter L. Larimore, MD*

SECTION A Normal Labor 383

*Kent Petrie, MD,
and Walter L. Larimore, MD*

SECTION B Ambulation and Positions in Labor 395

*Kent Petrie, MD,
and Walter L. Larimore, MD*

SECTION C Intrapartum Pain Management 398

*Kent Petrie, MD,
and Walter L. Larimore, MD*

SECTION D Support in Labor 406

*Kent Petrie, MD,
and Walter L. Larimore, MD*

SECTION E Intrapartum Fetal Heart Rate Monitoring 409

*Kent Petrie, MD,
and Walter L. Larimore, MD*

SECTION F Normal Delivery and Birthing Positions 413

*Kent Petrie, MD,
and Walter L. Larimore, MD*

SECTION G Management of the Second Stage 419

Matthew K. Cline, MD

SECTION H Management of the Perineum 423

Valerie J. King, MD, MPH

SECTION I Management of Third-Stage Labor 430

*Kent Petrie, MD,
and Walter L. Larimore, MD*

CHAPTER 15

Management of Labor Abnormalities 435

SECTION A Dystocia in the Nulliparous Patient 435

Matthew K. Cline, MD

SECTION B Term Premature Rupture of the Membranes 442

Wendy Brooks Barr, MD, MPH, MSCE

SECTION C Induction of Labor 445

James M. Nicholson, MD, MSCE

CHAPTER 16

Intrapartum Complications 454

SECTION A Fetal Intolerance of Labor 454

Kent Petrie, MD

SECTION B Shoulder Dystocia 465

Osman N. Sanyer, MD

SECTION C Chorioamnionitis 471

Stephen D. Ratcliffe, MD, MSPH

SECTION D Intrapartum Bleeding 475

John C. Houchins, MD

SECTION E Postpartum Hemorrhage 479

*Janice M. Anderson, MD, FAAFP,
and Narayana Rao V. Pula, MD*

SECTION F Retained Placenta 488

*Jose Matthew Mata, MD, MS,
and David Turok, MD, MPH*

SECTION G Preeclampsia and Eclampsia 491

Lawrence Leeman, MD, MPH

SECTION H Medical Emergencies in Pregnancy 495

Lee T. Dresang, MD

CHAPTER 17

Malpresentation and Malpositions 500

SECTION A Diagnosis 500

*Jamee H. Lucas, MD, AAFP,
and Elizabeth G. Baxley, MD*

SECTION B Face Presentation 502

*Elizabeth G. Baxley, MD,
and Jamee H. Lucas, MD, AAFP*

SECTION C	Brow Presentation	504
	<i>Elizabeth G. Baxley, MD,</i> <i>and Jamee H. Lucas, MD, AAFP</i>	
SECTION D	Transverse Lie	505
	<i>Elizabeth G. Baxley, MD,</i> <i>and Jamee H. Lucas, MD, AAFP</i>	
SECTION E	Transverse Arrest	506
	<i>Stephen D. Ratcliffe, MD, MSPH</i>	
SECTION F	Occiput Posterior Position	507
	<i>Stephen D. Ratcliffe, MD, MSPH</i>	
SECTION G	Breech Presentation	510
	<i>Stephen D. Ratcliffe, MD, MSPH</i>	
SECTION H	External Cephalic Version	516
	<i>Kent Petrie, MD</i>	
SECTION I	Twin Gestation	521
	<i>Ellen L. Sakornbut, MD</i>	

CHAPTER 18

Intrapartum Procedures

SECTION A	Use of Ultrasound in Labor and Delivery	523
	<i>Ellen L. Sakornbut, MD</i>	
SECTION B	Pudendal and Paracervical Blocks	529
	<i>Rachel Elizabeth Hall, MD, FFAFP</i>	
SECTION C	Amnioinfusion and Use of Intrauterine Pressure Catheter	532
	<i>Stephen D. Ratcliffe, MD, MSPH</i>	
SECTION D	Assisted Deliveries	534
	<i>Stephen D. Ratcliffe, MD, MSPH,</i> <i>and James R. Damos, MD</i>	
SECTION E	Episiotomy and Repair of Perineal Lacerations and Episiotomies	542
	<i>Robert W. Gobbo, MD,</i> <i>and Lawrence Leeman, MD, MPH</i>	
SECTION F	Amniocentesis during the Third Trimester of Pregnancy	555
	<i>Mark Deutchman, MD</i>	
SECTION G	Cesarean Delivery	560
	<i>Mark Deutchman, MD,</i> <i>and Neil J. Murphy, MD</i>	

CHAPTER 19

The First Month of Life

SECTION A	Initial Management of the Normal Newborn	572
	<i>Patricia Fontaine, MD, MS</i>	
SECTION B	Neonatal Resuscitation	580
	<i>Patricia Adam, MD, MSPH,</i> <i>and Patricia Fontaine, MD, MS</i>	
SECTION C	Neonatal Circumcision	588
	<i>Patricia Fontaine, MD, MS</i>	
SECTION D	Neonatal Jaundice	594
	<i>Karen Jankowski Fruechte, MD,</i> <i>and Patricia Fontaine, MD, MS</i>	
SECTION E	Evaluation and Management of Infection in the Newborn	602
	<i>Laura Chambers-Kersh, MD,</i> <i>and Patricia Fontaine, MD, MS</i>	
SECTION F	Infant Feeding and Nutrition	609
	<i>Patricia Fontaine, MD, MS</i>	
SECTION G	Bonding and Family Adaptation	612
	<i>Patricia Fontaine, MD, MS</i>	
SECTION H	General Care of the Neonate	615
	<i>Patricia Fontaine, MD, MS,</i> <i>and Sherri Fong, BS</i>	

CHAPTER 20

Postpartum Biomedical Concerns: Breastfeeding

SECTION A	Delayed Postpartum Hemorrhage	618
	<i>Charles Carter, MD,</i> <i>and Elizabeth G. Baxley, MD</i>	
SECTION B	Postpartum Endometritis	619
	<i>Elizabeth G. Baxley, MD,</i> <i>and Charles Carter, MD</i>	
SECTION C	Breastfeeding	623
	<i>Mary Rose Tully, MPH, IBCLC,</i> <i>and Patricia Ann Payne, BSN, CNM, MPH</i>	

SECTION D	Mastitis	633
	<i>Charles Carter, MD, and Elizabeth G. Baxley, MD</i>	
SECTION E	Postpartum Thyroiditis	635
	<i>Charles Carter, MD, and Elizabeth G. Baxley, MD</i>	
SECTION F	Septic Pelvic Thrombophlebitis	637
	<i>Charles Carter, MD</i>	
SECTION G	Postpartum Contraception	639
	<i>Christine Stabler, MD, FAAFP</i>	
CHAPTER 21		
	<i>Postpartum Psychosocial Concerns</i>	645
	<i>Dwenda K. Gjerdingen, MD, MS, Elizabeth Ann Shaw, BSc, MD, FCFP, and Sharon S.-L. Wong, PhD, RD</i>	
SECTION A	Maternal Adjustment	645
SECTION B	Paternal Adjustment	654
SECTION C	Marital Adjustment	655
SECTION D	Sibling Adjustment	657
SECTION E	Specific Family Situations	657
SECTION F	Return to Work	660

APPENDIX A	<i>Interpretation of Summary Tables</i>	664
------------	---	-----

APPENDIX B	<i>Analysis of Screening Tests</i>	665
------------	------------------------------------	-----

APPENDIX C	<i>Immunization during Pregnancy</i>	667
------------	--------------------------------------	-----

APPENDIX D	<i>Measuring Clinical Effectiveness by Calculating the Number Needed to Treat</i>	674
------------	---	-----

APPENDIX E	<i>Drugs for Common Conditions in Pregnancy</i>	676
	<i>Kent Petrie, MD</i>	

INDEX	685
-------	-----