

Table of Contents

Part I Patient Care

1 Life-Long OB/GYN Care for Women	3
From Birth to Adolescence	4
The Reproductive Years	5
Menopause	10
2 OB/GYN Examinations and Evaluations	15
Definitions	15
History	16
Physical Examination	17
Laboratory Evaluations	19
Diagnostic Imaging Procedures	21
3 Embryology of the Female Reproductive System	25
Definitions	25
Genital Embryogenesis	25
Anatomy	28
4 The Menstrual Cycle and Fertilization	31
Definitions	31
The Menstrual Cycle	32
Fertilization	37
5 Genetics and Genomic Applications in OB/GYN Practice	41
Definitions	41
Impact of Genetics and Genomics on OB/GYN Practice	42
Basic Concepts of Genetics	42
Types and Mechanisms of Genetic Abnormalities	43
Diagnosis and Management	50
6 Pap Smear and Human Papilloma Virus Testing	57
Pap Smear Terminology	57
Types of Pap Smear, Their Sensitivity, and Screening Guidelines	59
Human Papilloma Virus DNA Testing	61
Management	62
7 Genetic Screening and Obstetric Procedures	65
Definitions	65
Screening Strategies	65
Diagnostic Testing	68

Part II Obstetrics

Section I Normal Obstetrics

8 Maternal–Fetal Physiology	75
Maternal Physiology	75
Fetal Physiology	77
9 Preconception and Antepartum Care	81
Definitions	81
Preconception Care	81
Summary	85
Antepartum Care	85
Summary	87
10 Intrapartum Care and Fetal Surveillance	91
Definitions	91
Fetal Heart Rate: Normal and Pathologic Patterns	92
Other Methods for Intrapartum Fetal Surveillance	96
Fetal Metabolic Status Assessment	97
Interventions for Altered Heart Rate Patterns	97
11 Labor and Delivery	99
Labor Physiology	99
Mechanics of Labor	99
The Fetus	101
Cardinal Movements of Labor	101
Progress of Labor	104
Operative Vaginal Delivery	105
12 Immediate and Postpartum Newborn Care	107
Definitions	107
The Respiratory Transition	107
The Circulatory Transition	108
The Thermoregulatory Transition	108
Newborn Management	110
Discharge Procedures	113
Managing Neonatal Jaundice	113
General Laboratory Evaluation	114

Section II Abnormal Obstetrics

13 Ectopic Pregnancies	119
Definition	119
Diagnosis	119
Prevalence	119
Etiology and Pathophysiology	119
History	120
Treatment Options	122

14 Spontaneous Abortion	127	20 Premature Rupture of Membranes and Third Trimester Bleeding	191
Definitions	127	Definitions	191
Incidence and Risk Factors	128	Diagnosis	191
Etiology	128	Prevalence and Epidemiology	192
Diagnosis	129	Etiology and Pathophysiology	192
Treatment	130	History	195
Post-Treatment Evaluation and Counseling	131	Physical Examination	195
15 Pathological Labor and Delivery	135	Laboratory Testing	196
Preterm Labor	135	Treatment	197
Abnormal Labor	145	21 Hypertension in Pregnancy	203
16 Pre-Eclampsia–Eclampsia Syndrome	149	Definition	203
Definition and Diagnosis	149	Diagnosis	204
Prevalence and Epidemiology	151	Prevalence and Epidemiology	204
Etiology and Pathophysiology	151	Etiology and Pathophysiology	205
History	152	Medical History	206
Physical Examination	152	Physical Signs	206
Laboratory Testing	152	Laboratory Studies	206
Treatment of Pre-eclampsia	153	Treatment	207
Treatment of Severe Pre-eclampsia	154	Prognosis	208
Treatment of Eclampsia	155	Special Concerns	208
Antihypertensive Therapy	155	22 Postpartum Hemorrhage and Infection	211
17 Rhesus Isoimmunization	159	Definitions	211
Definition	159	Diagnosis	212
Diagnosis	159	Prevalence and Epidemiology	212
Prevalence and Epidemiology	160	Etiology and Risk Factors	213
Etiology	160	History	214
Pathophysiology	161	Physical Evaluation	214
History	161	Management	215
Physical Examination	162	23 Infectious Diseases in Pregnancy	219
Laboratory Testing	162	Definitions	219
Treatment	164	Viral Infections	219
18 Multifetal Pregnancy	167	Pregnancy in the HIV Era	223
Definitions	167	Bacterial Infections	225
Diagnosis	168	Toxoplasmosis	229
Prevalence and Epidemiology	168	24 Perinatal and Maternal Mortality	233
Etiology	169	Definitions	233
Pathophysiology	170	Epidemiology and Etiology	233
History	171	Management and Prevention	235
Laboratory Testing	173	25 Psychiatric Issues during and after Pregnancy	241
Management	173	Family Planning	241
Labor and Delivery in Multifetal Births	175	Genetics of Psychiatric Disorders	242
Triplets	178	Risk Factors for the Expectant Mother during Pregnancy	242
19 Preterm Birth and Fetal Growth Restrictions	179	Risk Factors for the Fetus during Pregnancy ...	242
Preterm Birth	179	Postpartum Complications	242
Fetal Growth Restriction	180	Addressing Psychiatric Issues during Pregnancy	243
Prevalence and Epidemiology	181	Postpartum Mood Disorders	247
Etiology and Pathophysiology	182	26 Other Medical Complications in Pregnancy ..	251
History Taking: Preterm Labor	183	Definitions	251
History Taking: Fetal Growth Restriction	184	Diagnosis	252
Physical Examination: Preterm Labor	184	Prevalence and Epidemiology	254
Physical Examination: Fetal Growth Restriction	185	Etiology and Pathophysiology	255
Laboratory Testing: Preterm Labor	186	History	257
Treatment Options	186		

41 Dysmenorrhea: Painful Menstruation	397	46 Gestational Trophoblastic Disease:	
Definition	397	Molar Pregnancy	441
Diagnosis	397	Definition	441
Prevalence and Epidemiology	397	Hydatidiform Mole	441
Etiology	398	Malignant Disease: Gestational	
History	398	Trophoblastic Neoplasia	444
Physical Examination and Laboratory Studies . .	399	47 Vulvar and Vaginal Lesions	447
Treatment	399	Types of Lesion	447
Treatment Failure	402	48 Cervical Neoplasia and Cancer	453
42 Infertility	403	Cervical Neoplasia	453
Definition	403	Cervical Cancer	457
Causes	403	49 Uterine Leiomyomas	461
Diagnostic Tests	404	Etiology	461
Treatment	406	Epidemiology	461
Lifestyle Changes to Improve Fertility		Symptoms	462
and Pregnancy Outcome	409	Diagnosis	462
Assisted Reproductive Technology	409	Treatment for Uterine Fibroids	462
Ovarian Hyperstimulation Syndrome	410	Uterine Sarcomas	467
Adoption	411	50 Endometrial Cancer	471
Psychosocial Aspects	411	Definition	471
Social and Ethical Issues	411	Etiology	472
43 Premenstrual Syndrome	415	Epidemiology	472
Definition	415	Prevention	472
Diagnosis	415	History	472
Prevalence and Epidemiology	416	Physical Examination	472
Etiology	416	Diagnosis	472
History	416	Screening	473
Physical Examination and Laboratory Studies . .	417	Staging and Surgical Treatment	473
Treatment	417	Adjuvant Treatment	474
44 Perimenopause, Menopause,		Post-treatment Follow-up	474
and Postmenopause: Consequences		Uterine Sarcoma	474
of Ovarian Reproductive Aging	421	51 Ovarian and Fallopian Tube Cysts	
Definition and Diagnosis	421	and Tumors	477
Etiology and Epidemiology	423	Ovarian Tumors	477
Physiology of Ovarian Aging	423	Fallopian Tube and Mesosalpingeal Cysts	483
Clinical Presentation	425	Fallopian Tube Cancer	483
Premature (Primary) Ovarian Failure	426		
Surgical Menopause	427		
Treatment	427		
The Future of Hormone Therapy	429		
		Part VI Human Sexuality	
Part V Gynecologic Oncology		52 Sexuality	487
45 The Biology of Cancer	435	Sexual Identity	487
Cervical Cancer is Caused by the Human		Sexual Response in Men and Women	487
Papilloma Virus	435	Sexual Dysfunction in the General Population . .	488
Endometrial Cancer is Caused by Unopposed		The Sexual History	488
Estrogen Stimulation	436	Common Sexual Problems in Women	489
Endometrial and Ovarian Cancers are		Treatment of Female Sexual Dysfunction	491
Caused by Germ-Line Mutations in DNA		Adolescent Sexuality	492
Mismatch Repair Genes	436	Postpartum Sexual Dysfunction	492
Breast and Ovarian Cancers can be Caused		Sexuality in Chronic Illness	492
by Mutations in BRCA1 and BRCA2	437	Sexuality in Older Adults	492
Evolving Issues in Cancer Biology	437	53 Domestic Violence and Sexual Assault	495
		Domestic Violence	495
		Sexual Assault	496

Part VII Professional Behavior, Ethics, and Legality

54 Medical Economics and Social Issues	501	56 Clinical Ethics in Obstetrics and Gynecology .	517
Population Health Promotes Economic		Medical Ethics	517
Growth and Stability	501	Ethical Dilemmas in Obstetrics:	
Health Economics Issues		the Fetus as Patient	519
in Developed Countries	501	Ethical Dilemmas in Obstetrics:	
Health Economics Issues in Countries		the Neonate as Patient	522
with Rapidly Growing Economies	505	Ethical Dilemmas in Gynecology	522
Health Economics Issues in Developing		General Guidelines for Making Ethical Decisions	524
and Poor Countries	505	57 Legal Issues in Obstetrics and Gynecology . . .	527
55 Provider–Patient Communications		Licensure, Certification, Credentialing,	
and Interactions	507	and Privileges	528
Core Values	507	Standard of Care	528
Provider–Patient Communications	508	Adverse Outcomes	528
Special Challenges in the Provider–		Informed Consent	529
Patient Relationship	513	Risk Management	530
Physician–Physician Interactions	515	Elements of Medical Negligence	530
		Common Areas of Increased Liability Risk	530
		Special Legal Provisions in the United States . . .	531
		Index	533