Contents

1.	Doppler Basics for a Gynecologist1
	• What is Doppler? 1
	• Color Doppler 2
	• Power Doppler 2
	Spectral Doppler 4
	• Color/Power Doppler Settings 5
	Settings for Pulsed Wave Doppler 8
	Setting the Speed of the Trace 12
	• Artifacts 12
	• Safety of Doppler 13
2.	Endometrial Lesions and Doppler15
	• Inflammatory Lesions 16
	Abnormal Response to Hormones 21
	Endometrial Metaplasia 23
	Neoplastic Lesions 24
3.	Doppler in Myometrial Lesions33
	Scan Routes And Modalities 33
	Assessment of the Uterus on Transvaginal Scan 33
	• Measurements 35
	• Doppler Studies 41
	Adenomyosis 44
	• Fibroids 50
	Disseminated Peritoneal Leiomyomatosis 54
	Benign Metastasizing Leiomyoma 54
	• Enhanced Myometrial Vascularity 55
4	Role of Doppler in Diagnosing Gynecological Malignancies59
••	Angiogenesis in Malignancies 59
	• Uterine Malignancies 60
5.	Doppler for Differential Diagnosis of Adnexal Lesions
	• Ovary <i>75</i>
	Ovarian Neoplasms 88
6.	Sonoendocrinology
	Androgen 95
	Anti-Müllerian Hormone 97
	Follicle-stimulating Hormone 97
	• Luteinizing Hormone 98
	• Estrogen 100
	a Progesterone 100

00-Prelims.indd 11 13-12-2023 14:30:30

7.	Ultrasound and a Treatment Cycle	112
	• Baseline Scan 112	
	Preovulatory Scan 116	
	Midluteal Phase 122	
Ω	Doppler in Normal and Abnormal Early Pregnancy	127
Ο.	Pregnancies with Abnormal Prognosis 131	127
	Trophoblastic Diseases 145	
	Trophobiastic Diseases 143	
9.	Doppler in Fetal Echocardiography	151
	• Equipment Settings 151	
	M Mode Study 151	
	• Four-chamber View 152	
	Left Ventricular Outflow Tract 155	
	Right Ventricular Outflow Tract 156	
	• Three-vessel View 156	
	Short Axis View 157	
	Arch/Longitudinal Views 157	
	• Fetal Circulation 159	
	Abnormalities Seen on Three-vessel View: Role of Doppler 174	
10.	Role of Doppler in Fetal Growth Restriction and Pregnancy-induced Hypertension	178
	Uteroplacental Vascular Changes and Effect on Fetal Metabolism 181	
	• Technique of Doppler Assessment 184	
	• Silent Period of Increased Resistance 185	
	• Early-onset Fetal Growth Restriction 192	
	Late-onset Fetal Growth Restriction 192	
	Obstetric Management Depending on Doppler Findings 193	
11.	Fetal Anemia: Role of Doppler	198
	Pathophysiology of Signs and Symptoms of Fetal Anemia 199	
	• Diagnosis 199	
	B-Mode Signs of Fetal Anemia 199	
	Role of Doppler in Fetal Anemia 200	
	• Limitations of Middle Cerebral Artery Peak Systolic Volume as a Predictor of Fetal Anemia 203	
12	Doppler for Diagnosis of Congenital Fetal Abnormalities	205
٠٤.	Doppler for Diagnosis of Structural Abnormalities 205	205
	- Doppler for Diagnosis of Structural Abriormalities 200	
,		

00-Prelims.indd 12