Contents

Chapter 1: Embryology and Developmental Defects in Female Genital Tract 1–7
- Gonadal Development 1
- Primordial Germ Cells 2
- Reproductive Tract Development 3
- Molecular Genetics in the Development of the Gonads and Reproductive Tract 4
- External Genitalia Development 4
- Disorders of Gonadal and Genital Tract Development 4

Chapter 2: Inflammatory and Benign Neoplastic Lesions of Vulva 8–23
- Anatomy 8
- Infectious Diseases of Vulva 8
- Non-infectious Inflammatory Diseases of Vulva 12
- Bullous Lesions of Vulva 16
- Vulvodynia 17
- Benign Diseases of Vulva 17
- Miscellaneous Conditions of Vulva 22

Chapter 3: Premalignant and Malignant Tumors of Vulva 24–36
- World Health Organization Classification of Tumors of Vulva 2014 24
- Squamous Tumors 24
- Squamous Cell Carcinoma of Vulva 27
- Paget Disease of Vulva 31
- Malignant Melanoma of Vulva 33
- Other Uncommon Malignant Tumors of Vulva 34

Chapter 4: Benign and Malignant Diseases of Vagina 37–49
- WHO Classification of Tumors of Vagina (2014) 37
- Developmental Disorders of Vagina 37
- Infectious Inflammatory Disorders 38
- Noninfectious Inflammatory Diseases of Vagina 40
- Traumatic, Surgery and Radiation-induced Lesions 40
- Postoperative Spindle Cell Nodule 41
- Vaginal Cysts 41
- Müllerian Cyst 41
- Vaginal Adenosis 42
- Vaginal Intraepithelial Neoplasia 43
- Neoplasms of Vagina 44

Chapter 5: Benign Diseases of Cervix 50–60
- Anatomy 50
- Histology 50
- Squamous Epithelium 50
- Columnar Epithelium 51
- Stroma 51

- Squamocolumnar Junction and Transformation Zone 51
- Changes in Normal Menstrual Cycle 53
- Pregnancy-induced Changes 53
- Arias-Stella Reaction 53
- Squamous Metaplasia 53
- Immature Squamous Metaplasia 54
- Tubal Metaplasia 54
- Transitional Cell Metaplasia 54
- Inflammation of Cervix 55
- Hyperplasia of Cervix 56
- Deep Endocervical Glands and Cysts 59
- Endocervical Polyp 59
- Cervical Cysts 59
- Tunnel Clusters 59

Chapter 6: Preneoplastic and Neoplastic Lesions of Cervix **61–77**
- WHO Classification of Tumors of the Uterus Cervix 61
- The Human Papilloma Virus 62
- Terminology of Preneoplastic Lesions of Cervix 64
- Cervical Intraepithelial Neoplasm Grade 1 or Low Grade Squamous Intraepithelial Lesion 65
- High Grade Squamous Intraepithelial Lesions 66
- Squamous Cell Carcinoma 71
- Variants of Squamous Cell Carcinoma 74

Chapter 7: Glandular and Miscellaneous Lesions of Cervix **78–95**
- Preneoplastic Lesion of Cervical Adenocarcinoma 78
- Early Invasive Adenocarcinoma (Microinvasive Adenocarcinoma) 80
- Adenocarcinoma 81
- Endometrioid Adenocarcinoma 84
- Clear Cell Carcinoma 85
- Serous Adenocarcinoma 85
- Mesonephric Carcinoma 85
- Adenosquamous Carcinoma 86
- Glassy Cell Carcinoma 86
- Adenoid Cystic Carcinoma (ADC) 87
- Adenoid Basal Cell Carcinoma (ABC) 88
- Neuroendocrine Carcinoma 88
- Small Cell Carcinoma of Cervix 88
- Carcinoid and Atypical Carcinoid of Cervix 89
- Large Cell Neuroendocrine Carcinoma 89
- Metastatic Carcinoma in Cervix 89
- Mesenchymal Tumors 90
- Lymphoma of Cervix 92
- Mixed Mesodermal Tumor 92
- Adenomyoma 94

Chapter 8: Endometrium: Benign Lesions **96–115**
- Anatomy and Histology of the Uterus 96
- Cyclic Endometrium 97
- Endometrial Dating and Biopsy 102
- Postmenopausal Endometrium 102
- Pregnancy-induced Changes 103
- Artifacts in Endometrium 104

- Dysfunctional Uterine Bleeding 105
- Hormone-induced Changes 107
- Endometritis 108
- Endometrial Polyp 109
- Adenomyomatous Polyp 110
- Atypical Polypoid Adenomyoma (APAM) 110
- Endometrial Metaplastic and Reactive Changes 111
- Asherman's Syndrome 113
- Endometriosis 113

Chapter 9: Uterus: Preneoplastic Lesions and Carcinoma 116–139
- WHO Classification of the Tumors of the Uterine Corpus 116
- Endometrial Hyperplasia 117
- Endometrial Intraepithelial Neoplasia 119
- Endometrial Carcinoma 120
- Variants of Endometrioid Carcinoma 125
- Serous Carcinoma 129
- Clear Cell Adenocarcinoma 131
- Mixed Types of Carcinoma 133
- Squamous Cell Carcinoma 133
- Transitional Cell Carcinoma 133
- Small Cell Carcinoma 133
- Ovarian Carcinoma along with Uterine Carcinoma 133
- Tumors of the Epithelial and Mesenchymal Component (Mixed Müllerian Tumor) 135

Chapter 10: Mesenchymal Tumor of Uterus 140–156
- Endometrial Stromal Tumors 140
- Smooth Muscle Tumors 144
- Leiomyosarcoma 149
- Myxoid Variant 151
- Epithelioid Leiomyosarcomas 151
- Uterine Smooth Muscle Tumors of Uncertain Malignant Potential 152
- Perivascular Epithelioid Cell Tumors 153
- Adenomatoid Tumor 153
- Adenomyosis and Adenomyoma 154
- Uterine Tumors Resembling Ovarian Sex Cord-like Elements 155

Chapter 11: Anatomy, Histology and Non-neoplastic Lesions of Ovary 157–168
- Anatomy of the Ovary 157
- Histology 157
- Follicle and Derivatives 157
- Infections of Ovary 160
- Non-neoplastic Lesions of the Follicular and Stromal Elements 161
- Polycystic Ovarian Syndrome (PCOS) 163
- Stromal Hyperplasia and Stromal Hyperthecosis 165
- Hilus Cell Hyperplasia 165
- Massive Stromal Edema and Fibromatosis 165
- Pregnancy Luteoma 166
- Ovarian Decidua (Ectopic Decidua) 166
- Ovarian Torsion and Infarction 166
- Ovarian Failure 167
- Congenital Lesions of Ovary 167

Chapter 12: Ovarian Tumor: General Aspect 169–178
- Classification of Ovarian Tumors 169
- Classification 171
- Clinical Features 171
- Etiology and Risk Factors 171
- Pathogenesis and Precursor Lesions of Ovarian Carcinoma with Molecular Pathology 171
- Diagnosis and Screening 175
- Staging 176
- Prognostic Factors 176
- Treatment 177

Chapter 13: Epithelial Carcinoma of Ovary 179–208
- Serous Tumor 179
- Serous Carcinoma 184
- Mucinous Tumor of Ovary 186
- Endometrioid Carcinoma of Ovary 192
- Malignant Müllerian Mixed Tumor (Carcinosarcoma) 195
- Endometrioid Stromal Sarcoma 197
- Clear Cell Tumors of Ovary 198
- Transitional Cell Tumor 201
- Mixed Epithelial Tumor 204
- Squamous Cell Carcinoma 205
- Undifferentiated Carcinoma 205
- Neuroendocrine Carcinoma of the Ovary 205

Chapter 14: Sex Cord Tumors of Ovary 209–227
- Granulosa Cell Tumor 209
- Sertoli–Leydig Cell Tumor 219
- Sertoli Cell Tumor 224
- Gynandroblastoma 225
- Sex Cord Tumor with Annular Tubules 225
- Steroid Cell Tumors 225

Chapter 15: Germ Cell Tumor of Ovary 228–244
- Dysgerminoma 228
- Yolk Sac Tumors 230
- Embryonal Carcinoma 234
- Polyembryoma 235
- Choriocarcinoma 235
- Teratoma 236
- Mixed Malignant Germ Cell Tumors 243
- Gonadoblastoma 243

Chapter 16: Metastatic and Miscellaneous Tumors of Ovary 245–250
- Metastatic Tumors of Ovary 245
- Miscellaneous Tumors of Ovary 248

Chapter 17: Fallopian Tube 251–261
- Anatomy 251
- Histology 251
- Blood Supply and Lymphatics 252
- Non-neoplastic Lesions of Fallopian Tube 252
- Salpingitis Isthmica Nodosa 253
- Tubal Pregnancy 254

- Infections 254
- Torsion 256
- Tumors of the Fallopian Tube 256
- Cysts 259
- Female Adnexal Tumor of Probable Wolffian Origin 260

Chapter 18: Pathology of Placenta **262–277**
- Normal Development 262
- Microscopy 263
- Placenta Gross 264
- Indications of Placental Examination 264
- Abnormalities of the Shape of Placenta 264
- Abnormal Adherence of Placenta 265
- Multiple Gestations 266
- Placental Inflammation and Intrauterine Infections 268
- Circulatory Disorders of Placenta: Maternal Circulatory Disorder 271
- Chorangiosis 274
- Placenta in Maternal and Fetal Disorders 274
- Pathology of Membranes 275
- Non-trophoblastic Tumors 275
- Umbilical Cord Pathology 276

Chapter 19: Gestational Trophoblastic Disease **278–287**
- Hydatidiform Mole 278
- Invasive Hydatidiform Mole 280
- Choriocarcinoma 280
- Placental Site Trophoblastic Tumor 283
- Epithelioid Trophoblastic Tumor 285
- Exaggerated Placental Site Reaction 286
- Placental Site Nodule 286

Chapter 20: Gross Examination of the Samples and Synoptic Reporting Format **288-295**
- Essential Things Required before Grossing 288
- Grossing Room 288
- Individual Specimen 288
- Vulvectomy Specimen 292
- Salpingectomy Specimen 292
- Oophorectomy 293
- Examination of the Placenta 293
- Synoptic Reporting of Gynecological Lesions 294

Index *297*