

# Contents

<b>Screening for Cervical Cancer Precursors to Prevent Invasive Disease</b> . . . . .	<b>1</b>
---	----------

<b>Methods of Obtaining and Preparing Cervical Tissue for Histological Examination</b> . . . . .	<b>2</b>
--	----------

<b>Diagnostic or Therapeutic Procedures</b> . . . . .	<b>2</b>
Colposcopically Directed (Punch) Biopsy . . . . .	2
Cold Knife Conization . . . . .	2
Loop Electrosurgical Excision Procedure . . . . .	4
Endocervical Curettage . . . . .	4
Simple Hysterectomy . . . . .	5
<b>Preparation of the Cervical Specimen</b> . . . . .	<b>5</b>

<b>Immunohistochemistry and In Situ Hybridization</b> . . . . .	<b>7</b>
---	----------

<b>Immunohistochemistry</b> . . . . .	<b>7</b>
Reasons for Use . . . . .	8
Cervical Tumor Cell Differentiation . . . . .	8
Distinction of Squamous, Glandular and Neuroendocrine Lesions . . . . .	8
CIN versus Reactive/Atrophic Epithelia . . . . .	9
Adenocarcinoma In Situ versus Mimics . . . . .	10
Endocervical Lesions versus Upper Genital Tract Lesions . . . . .	11
<b>In Situ Hybridization</b> . . . . .	<b>11</b>

<b>Normal Histology, Regeneration, and Repair</b> . . . . .	<b>13</b>
---	-----------

<b>Normal Ectocervix</b> . . . . .	<b>13</b>
<b>Ascending Repair</b> . . . . .	<b>18</b>
<b>Normal Endocervix</b> . . . . .	<b>20</b>
<b>Descending Repair</b> . . . . .	<b>24</b>
<b>Transformation Zone</b> . . . . .	<b>29</b>

<b>Vestigial and Heterotopic Tissues</b> . . . . .	<b>32</b>
Mesonephric Duct Remnants and Hyperplasia . . . . .	32
Müllerian Duct Remnants and Metaplasia . . . . .	34
Heterotopic Ectodermal and Mesodermal Structures . . . . .	39
<b>Hormonally Induced Changes</b> . . . . .	<b>42</b>
Effects of Estrogen . . . . .	42
Parakeratosis and Hyperkeratosis of the Ectocervix . . . . .	42
Cystic Hyperplasia of the Endocervix . . . . .	42
Effects of Endogenous Progesterone under Hypersecretion . . . . .	46
Glandular and Cystic Hyperplasia of the Endocervix . . . . .	46
Effects of Exogenous Gestagens . . . . .	49
Glandular (Adenomatous) Hyperplasia of the Endocervix . . . . .	49
Microglandular Hyperplasia of the Endocervix . . . . .	51
Glandular Papillary Ectropium . . . . .	54
Polyps of the Ecto- and Endocervix . . . . .	54
<b>Inflammatory Lesions</b> . . . . .	<b>57</b>
Nonspecific Ecto- and Endocervicitis . . . . .	57
Specific Inflammations . . . . .	61
Viral Infections . . . . .	61
Bacterial Infections . . . . .	64
Parasitic Infections . . . . .	67
Fungal Infections . . . . .	69
Infections of Unknown Etiology . . . . .	70
Irradiation Changes . . . . .	72
Postoperative Spindle Cell Nodule . . . . .	72
<b>Benign Tumors</b> . . . . .	<b>74</b>
Epithelial Tumors . . . . .	74
Mesenchymal Tumors . . . . .	78
Mixed Tumors . . . . .	80

<b>Premalignant Lesions</b> . . . . .	<b>82</b>
<b>Introduction</b> . . . . .	82
<b>Etiology and Pathogenesis</b> . . . . .	83
<b>Histopathology and Immunohistochemistry</b> . . . . .	86
Dysplasia and Carcinoma In Situ (CIN 1–3) . . . . .	86
Squamous Cell Differentiation . . . . .	87
Reserve Cell Differentiation . . . . .	94
Adenocarcinoma In Situ . . . . .	110
<b>Malignant Tumors</b> . . . . .	<b>117</b>
<b>Epithelial Tumors</b> . . . . .	117
Squamous and Reserve Cell Types . . . . .	117
Microinvasive Carcinoma . . . . .	117
Invasive Carcinoma . . . . .	122
Small Cell Type of Nonkeratinizing Carcinoma . . . . .	123
Large Cell Type of Nonkeratinizing Carcinoma . . . . .	123
Large Cell Keratinizing Carcinoma . . . . .	123
Lymphoepithelioma-like Carcinoma . . . . .	124
Verrucous Carcinoma . . . . .	124
Warty (Condylomatous) Carcinoma . . . . .	125
Papillary Squamous Cell Carcinoma . . . . .	125
Squamo-Transitional Cell Carcinoma . . . . .	136
Glandular Type . . . . .	136
Mucinous Adenocarcinoma . . . . .	137
Endometrioid Adenocarcinoma . . . . .	141
Clear Cell Adenocarcinoma . . . . .	149
Serous Adenocarcinoma . . . . .	149
Mesonephric Adenocarcinoma . . . . .	149
Mixed Type . . . . .	158
Adenosquamous Carcinoma . . . . .	158
Mucoepidermoid Carcinoma . . . . .	160
Adenoid Type . . . . .	162
Adenoid Cystic Carcinoma . . . . .	162
Adenoid Basal Carcinoma . . . . .	162
Neuroendocrine Type . . . . .	165
Neuroectodermal Type . . . . .	166
<b>Mesenchymal Tumors</b> . . . . .	168
<b>Mixed Epithelial and Mesenchymal Tumors</b> . . . . .	170
Carcinosarcoma . . . . .	170
Müllerian Adenosarcoma . . . . .	170
Embryonal Rhabdomyosarcoma . . . . .	170
Wilms Tumor . . . . .	176

<b>Miscellaneous Tumors</b> . . . . .	176
Malignant Lymphomas . . . . .	176
Granulocytic Sarcoma . . . . .	177
Malignant Melanoma . . . . .	177
Endodermal Sinus (Yolk Sac) Tumor . . . . .	178

<b>Secondary Tumors</b> . . . . .	178
-----------------------------------	-----

<b>References</b> . . . . .	180
-----------------------------	-----

<b>Subject Index</b> . . . . .	193
--------------------------------	-----