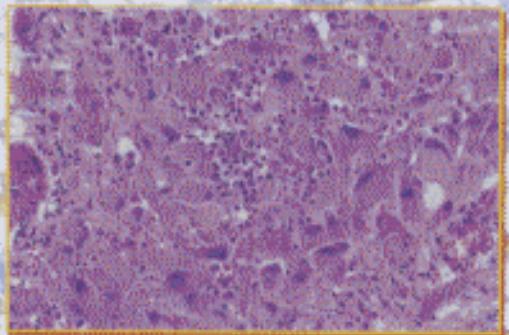
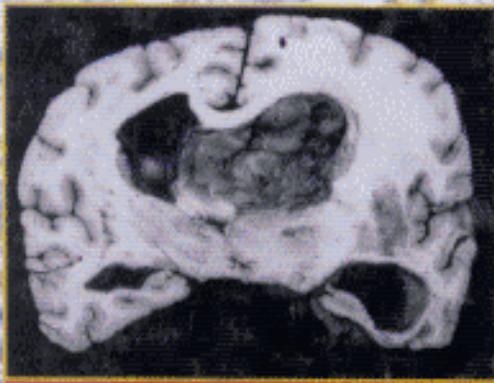
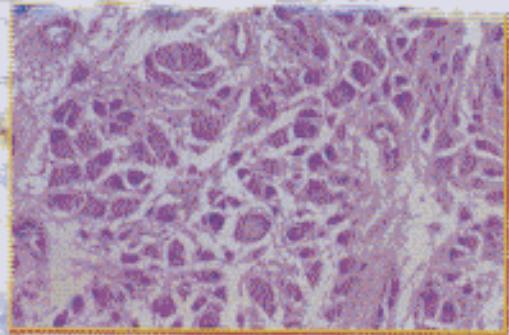
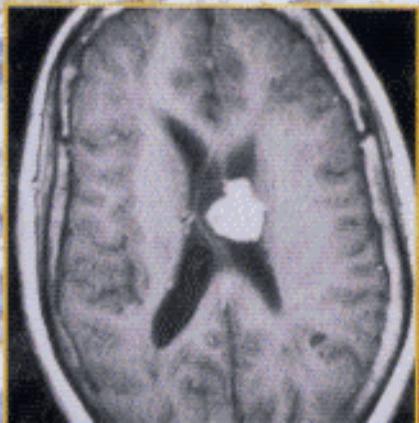


# PATHOLOGY OF TUMORS OF THE CENTRAL NERVOUS SYSTEM

A guide to  
histologic diagnosis



Roger E McLendon  
Darell D Bigner  
Sandra H Bigner &  
James M Provenzale



**Preface**

ix

**Acknowledgements**

xi

**PART I: MASS LESIONS IN ADULT BRAINS**

<b>Chapter 1</b>	<b>Tumors of unknown primaries</b>	<b>3</b>
<b>Chapter 2</b>	<b>Gliomas – glioblastomas (WHO grade IV)</b>	<b>11</b>
<b>Chapter 3</b>	<b>Anaplastic astrocytoma (WHO grade III)</b>	<b>21</b>
<b>Chapter 4</b>	<b>Well-differentiated fibrillary astrocytoma (WHO grade II)</b>	<b>30</b>
<b>Chapter 5</b>	<b>Protoplasmic astrocytomas (WHO grade II)</b>	<b>35</b>
<b>Chapter 6</b>	<b>Pilocytic astrocytomas (WHO grade I)</b>	<b>36</b>
<b>Chapter 7</b>	<b>Oligodendrogloma (WHO grade II)</b>	<b>37</b>
<b>Chapter 8</b>	<b>Mixed oligodendroglial and astrocytic neoplasms (WHO grades II–III)</b>	<b>44</b>
<b>Chapter 9</b>	<b>Anaplastic oligodendroglomas (WHO grade III)</b>	<b>46</b>
<b>Chapter 10</b>	<b>Ependymomas (WHO grades II–III)</b>	<b>49</b>
<b>Chapter 11</b>	<b>Meningiomas (WHO grades I–III)</b>	<b>50</b>
<b>Chapter 12</b>	<b>Atypical and malignant meningiomas (WHO grades II–III)</b>	<b>63</b>
<b>Chapter 13</b>	<b>Solitary fibrous nodule (WHO grade I)</b>	<b>69</b>
<b>Chapter 14</b>	<b>Intracranial and intraspinal schwannomas (WHO grade I)</b>	<b>71</b>
<b>Chapter 15</b>	<b>Malignant primary nerve sheath tumor (WHO grades III–IV)</b>	<b>82</b>
<b>Chapter 16</b>	<b>Capillary hemangioblastoma</b>	<b>86</b>
<b>Chapter 17</b>	<b>Hemangiopericytoma of the meninges (WHO grades II–III)</b>	<b>94</b>
<b>Chapter 18</b>	<b>Cortical meningoangiomatosis</b>	<b>99</b>
<b>Chapter 19</b>	<b>Angiosarcoma</b>	<b>100</b>
<b>Chapter 20</b>	<b>Melanocytic lesions</b>	<b>101</b>
<b>Chapter 21</b>	<b>Sarcomas</b>	<b>106</b>
<b>Chapter 22</b>	<b>Malignant lymphomas and hematopoietic neoplasms</b>	<b>114</b>

## PART II: MASS LESIONS IN BRAINS OF CHILDREN AND YOUNG ADULTS

Chapter 23	Astrocytomas of children and young adults (WHO grades I–IV)	127
Chapter 24	Ependymoma (WHO grades I–III)	163
Chapter 25	Choroid plexus papillomas (WHO grade I)	179
Chapter 26	Choroid plexus carcinomas (WHO grades III–IV)	183
Chapter 27	Medulloblastoma (WHO grade IV)	186
Chapter 28	Cerebral neuroblastoma (WHO grade IV)	200
Chapter 29	Medulloepithelioma (WHO grade IV)	207
Chapter 30	Ganglion cell tumors (WHO grades I–II)	209
Chapter 31	Desmoplastic infantile ganglioglioma (WHO grade I)	217
Chapter 32	Dysembryoplastic neuroepithelial tumor (DNT) (WHO grade I)	219
Chapter 33	Central neurocytoma (WHO grade I)	227
Chapter 34	Mixed ganglion cell neurocytic tumors	232
Chapter 35	Paraganglioma	234
Chapter 36	The pineal gland	238

## PART III: TUMORS OF MALDEVELOPMENTAL ORIGIN

Chapter 37	Tumors of germ cell origin	251
Chapter 38	Atypical teratoid tumors	265
Chapter 39	Rhabdoid tumors	267
Chapter 40	Lipomas	271
Chapter 41	Arachnoid cyst	275
Chapter 42	Neuroglial cysts	279
Chapter 43	Dermoid cyst, epidermoid cyst, and dermal sinus	281
Chapter 44	Colloid cysts of the third ventricle	289
Chapter 45	Rathke cleft cyst	294
Chapter 46	Craniopharyngioma	299
Chapter 47	Intracranial enterogenous cyst	306
Chapter 48	Spinal enterogenous cysts	307
Index		309