

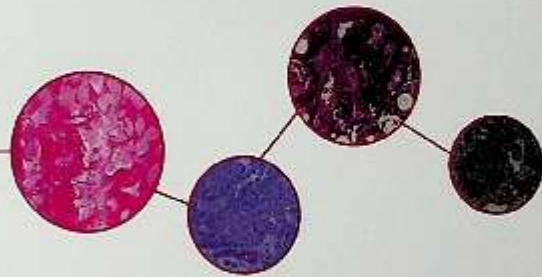
---

# Surgical Pathology of Canine Neoplasms

FIRST EDITION

---

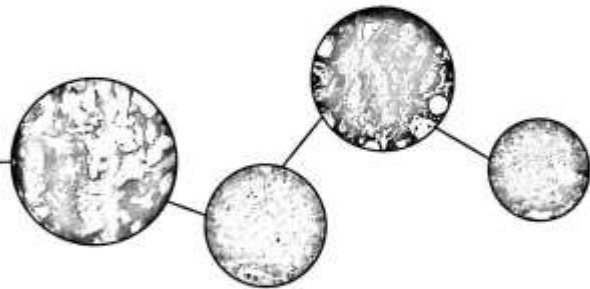
KYU-SHIK JEONG



---

# **Surgical Pathology of Canine Neoplasms**

FIRST EDITION



KYU-SHIK JEONG

## Preface

This book is produced to help students, researchers, veterinary pathologists and clinicians providing a basic interpretation of neoplasm from biopsied samples. Items which explain definition, histo-morphological description of neoplasm and some current therapeutic information for pets are also included. This book is designed for providing basic histo-pathological descriptive guidance of tumors of biopsied cases of a dog and giving information for handling animals with therapeutic aspects.

## Section 01 Epidermis, Appendages

1. Epidermal cyst \_ 12
2. Cutaneous, multiple follicular cysts \_ 14
3. Dermoid cyst \_ 16
4. Intracutaneous cornifying epithelioma \_ 18
5. Viral papilloma ( I ) \_ 20
6. Viral papilloma ( II ) \_ 22
7. Angiokeratoma \_ 24
8. Basal cell epithelioma(trichoblastoma) – Ribbon type \_ 26
9. Cutaneous basal cell tumor–Island type \_ 28
10. Basal cell epithelioma(Ribbon type trichoblastoma, exhibiting medusoid pattern \_ 30
11. Basal cell tumor – Solid type \_ 32
12. Basal cell carcinoma \_ 34
13. Baso squamous cell carcinoma \_ 36
14. Squamous cell carcinoma \_ 38
15. Intracutaneous keratinizing acanthoma demonstrating the typical complex wall with mucin \_ 40
16. Trichoepithelioma ( I ) \_ 42
17. Trichoepithelioma ( II ) \_ 44
18. Pilonatrixoma \_ 46
19. Sebaceous gland hyperplasia \_ 48
20. Histiocytoma \_ 50
21. Sebaceous gland adenoma \_ 52
22. Sebaceous epithelioma \_ 54
23. Meibomian gland epithelioma \_ 56
24. Meibomian carcinoma \_ 58
25. Perianal gland adenoma \_ 60
26. Perianal gland adenoma with squamous metaplasia \_ 62
27. Perianal gland adenocarcinoma \_ 64
28. Ceruminous gland carcinoma \_ 66
29. Apocrine carcinoma \_ 68

## Section 02 Dermis

30. Dermal melanocytoma \_ 72
31. Benign amelanocytic melanoma–Spindle cell type \_ 74
32. Angiotropic malignant melanoma \_ 76
33. Malignant melanoma and squamous cell carcinoma \_ 78
34. Fibroma \_ 80
35. Myxomatous fibroma ( I ) \_ 82
36. Myxomatous fibroma ( II ) \_ 84
37. Cutaneous fibrosarcoma \_ 86

38. Myxosarcoma \_ 88
39. Subcutaneous leiomyosarcoma \_ 90
40. Cutaneous lipoma \_ 92
41. Infiltrative lipoma \_ 94
42. Well differentiated liposarcoma \_ 96
43. Liposarcoma \_ 98
44. Mesenchymoma (Angioliposarcoma) \_ 100
45. Hemangioma \_ 102
46. Hemangioma (Cavernous form) \_ 104
47. Cutaneous hemangiosarcoma \_ 106
48. Hemangiopericytoma \_ 108
49. Mast cell tumor \_ 110
50. Malignant mast cell tumor \_ 112
51. Cutaneous fibrous histiocytoma \_ 114
52. Histiocytoma \_ 116
53. Malignant fibrous histiocytoma \_ 118
54. Cutaneous plasmacytoma \_ 120
55. Fibroepithelial polyp \_ 122

### Section 03 Mammary gland

56. Mammary gland. Papillary adenoma \_ 126
57. Mammary gland. Simple adenoma (Tubular type) \_ 128
58. Mammary gland. Complex adenoma \_ 130
59. Mammary gland. Simple adenoma (Solid type) \_ 132
60. Mammary gland. Myxoid lipoma \_ 134
61. Mammary gland. Malignant fibrous histiocytoma (Giant cell type) \_ 136
62. Mammary gland. Simple adenoma (Tubulopapillary type) \_ 138
63. Mammary gland. Simple adenocarcinoma \_ 140
64. Mammary gland. Papillary adenocarcinoma \_ 142
65. Mammary gland. Simple carcinoma (Cystic papillary type) \_ 144
66. Mammary gland. Solid carcinoma \_ 146
67. Mammary gland. Complex carcinoma \_ 148
68. Mammary gland. Squamous cell carcinoma \_ 150
69. Mammary gland. Carcinosarcoma \_ 152
70. Mammary gland. Myoepithelioma \_ 154
71. Mammary gland. Myxomatous myoepithelioma \_ 156
72. Mammary gland. Myxofibroma \_ 158
73. Mammary gland. Myoepithelial osteoma \_ 160
74. Mammary gland. Benign mixed tumor \_ 162
75. Chondrosarcomatous mammary mixed tumor \_ 164

- 76. Mammary gland. Malignant mixed tumor \_ 166
- 77. Mammary gland. Osteosarcoma \_ 168
- 78. Mammary gland. Malignant melanoma \_ 170
- 79. Mammary gland. Intraductal carcinoma in situ (grade I) \_ 172
- 80. Mammary gland. Intraductal carcinoma in situ (grade II) \_ 174
- 81. Mammary gland. Tubular adenocarcinoma \_ 176
- 82. Mammary gland. Simple cribriform carcinoma \_ 178

#### Section 04 Skeletal muscle, bone

- 83. Osteosarcoma \_ 182
- 84. Primary osteosarcoma with metastasis to regional lymphnode \_ 184
- 85. Pleomorphic (intramedullary) osteosarcoma \_ 186
- 86. Chondrosarcoma \_ 188
- 87. Hemangioma (Cavernous form) \_ 190
- 88. Alveolar rhabdomyosarcoma \_ 192

#### Section 05 Immune system, bone marrow

- 89. Spleen. Myelolipoma \_ 196
- 90. Spleen. Angiomyxoma \_ 198
- 91. Spleen. Lymphoma (B cell type) \_ 200
- 92. Spleen. Hemangiosarcoma \_ 202
- 93. Malignant multiple myeloma \_ 204

#### Section 06 Digestive system

- 94. Epulis (Acanthomatous type) \_ 208
- 95. Fibromatous epulis \_ 210
- 96. Ossifying epulis \_ 212
- 97. Gingiva. Malignant melanoma \_ 214
- 98. Gingiva. Histiocytoma \_ 216
- 99. Adenomatoid odontogenic tumor \_ 218
- 100. Tongue. Lingual papilloma \_ 220
- 101. Gingiva. Basal cell carcinoma \_ 222
- 102. Lingual squamous cell carcinoma \_ 224
- 103. Oral amelanotic malignant melanoma \_ 226
- 104. Oral mucosa. Malignant melanoma \_ 228
- 105. Stomach. Gastric adenoma \_ 230

- 106. Rectum. Adenocarcinoma \_ 232
- 107. Salivary gland. Adenoma \_ 234
- 108. Salivary gland. Mucocele with ossifying metaplasia \_ 236
- 109. Salivary gland. Malignant mixed tumor \_ 238
- 110. Parotid gland. Acinic cell carcinoma (Acinar cell type, solid pattern) \_ 240
- 111. Hepatocellular adenoma \_ 242
- 112. Hepatocellular carcinoma \_ 244
- 113. Cholangiocarcinoma \_ 246
- 114. Abdominal cavity. Pleomorphic liposarcoma \_ 248

### Section 07 Urinary system

- 115. Urinary bladder. Myxoma \_ 252
- 116. Urinary bladder. Transitional cell carcinoma \_ 254
- 117. Urinary bladder. Fibrosarcoma \_ 256

### Section 08 Reproductive system

- 118. Seminoma(low grade malignancy) \_ 260
- 119. Seminoma \_ 262
- 120. Interstitial cell tumor(=Leydig cell tumor) \_ 264
- 121. Sertoli cell tumor \_ 266
- 122. Transmissible venereal tumor \_ 268
- 123. Ovarian granulosa cell tumor \_ 270
- 124. Ovary. Dysgerminoma \_ 272
- 125. Ovary. Malignant granulosa cell tumor \_ 274
- 126. Uterine leiomyoma \_ 276
- 127. Uterine leiomyosarcoma \_ 278
- 128. Ovarian leiomyoma \_ 280
- 129. Ovary. Bilateral adenocarcinoma \_ 282

### Section 09 Endocrine system

- 130. Congenital thyroid gland adenocarcinoma \_ 286

### Section 10 Nervous sensory system

- 131. Lacrimal gland. Lacrimal adenocarcinoma \_ 290
- 132. Ossifying fibroma of pinna \_ 292