

# Table of Contents

Foreword

Preface

Contributors

Acknowledgments

Lists of Abbreviations

## Section I – Brain

1. Supratentorial Brain Neoplasms
2. Infratentorial Brain Neoplasms
3. Metastatic Brain Disease
4. Meningiomas
5. Internal Auditory Canal Neoplasms
6. Sellar/Parasellar Neoplasms
7. Diploic Space Lesions
8. Intraparenchymal Hemorrhage
9. Extraaxial and Subarachnoid Hemorrhage
10. Arteriovenous Malformations
11. Other Vascular Malformations
12. Aneurysms
13. Ischemia and Infarction I
14. Ischemia and Infarction II
15. Periventricular Leukomalacia
16. Diffuse Axonal Injury
17. Neurodegenerative Disorders
18. Multiple Sclerosis
19. Parenchymal Infections
20. Sinus Disease
21. Meningitis
22. Immunocompromise
23. Posterior Fossa Congenital Malformations
24. Arachnoid Cysts
25. Other Congenital Malformations
26. Inherited White Matter Disease
27. Neurofibromatosis and Von Hippel-Lindau Syndrome
28. Tuberous Sclerosis and Sturge-Weber Syndrome

## Section II – Cervical Spine

29. Congenital Abnormalities
30. Trauma
31. Disk Herniations
32. Degenerative Disease

- 33. Rheumatoid and Postoperative Changes
- 34. Other Inflammatory/Infectious/Degenerative Diseases
- 35. Metastatic Disease
- 36. Primary Neoplasms

### Section III – Thoracic Spine

- 37. Disk Herniations
- 38. Canal Compromise
- 39. Primary Neoplasms
- 40. Vascular Abnormalities

### Section IV – Lumbar Spine

- 41. Congenital Abnormalities
- 42. Common Incidental Findings
- 43. Compression Fractures
- 44. Disk Herniations
- 45. Postoperative Lumbar Spine
- 46. Degenerative Disk Disease I
- 47. Degenerative Disk Disease II
- 48. Infections
- 49. Metastatic Disease
- 50. Disorders of Marrow
- 51. Primary Neoplasms
- 52. Leptomeningeal Carcinomatosis

### Section V – Head and Neck

- 53. Common Incidental Findings
- 54. Neoplasia I
- 55. Neoplasia II
- 56. Infections

### Section VI – Heart and Chest

- 57. Cardiomyopathy
- 58. Ischemic Heart Disease
- 59. Cardiac Function and Valvular Heart Disease
- 60. Congenital Heart Disease
- 61. Thoracic Vasculature
- 62. Thoracic Neoplasia

### Section VII – Breast

- 63. Breast Neoplasia
- 64. Breast Implants

## Section VIII – Abdomen and Pelvis

65. Benign Hepatic Masses
66. Malignant Hepatic Masses
67. Diffuse Hepatic Pathology
68. Biliary Disease
69. Adrenal Disease
70. Renal Masses
71. Pancreatic Disease
72. Pediatric Abdominal Disease
73. Urinary Bladder and Male Pelvis
74. Benign Lesions of the Female Pelvis
75. Uterine and Cervical Cancer
76. Ovarian Pathology

## Section IX – Musculoskeletal System

77. Meniscal Tears I
78. Meniscal Tears II
79. Cruciate Ligaments
80. Collateral Ligaments, Knee
81. Osteochondral Lesions, Knee
82. Rotator Cuff Tears
83. Glenohumeral Instability I
84. Glenohumeral Instability II, Labrum
85. Avascular Necrosis of the Hip
86. Insufficiency Fractures and Degenerative Disease of the Hip
87. Carpal Tunnel Disease and Wrist Fractures
88. Triangular Fibrocartilage Complex
89. Fractures and Other Causes of Wrist Pain
90. Temporomandibular Joint Disease
91. Ligamentous/Tendinous Elbow Injuries
92. Tendinous Injuries of the Ankle and Foot
93. Ligamentous Injuries of the Ankle
94. Osseous/Cartilaginous Ankle Disorders
95. Musculoskeletal Neoplasms
96. Diseases of Marrow

## Section X – Contrast Media

97. Overview of MR Contrast Agents
98. MR Contrast Agent Safety

## Section XI – MR Angiography

99. MRA Principles and Carotid MRA

100. Peripheral MRA

101. Renal Artery MRA

102. Other MRA Applications