MRI of Bone and Soft Tissue Tumors and Tumorlike Lesions

Differential Diagnosis and Atlas

Steven P. Meyers

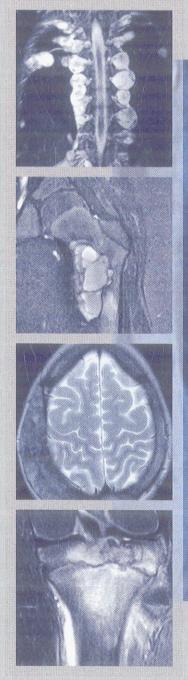






Table of Contents

Intro	duction	1	A 8	Chondroma, Intramedullary Type: Enchondroma (Also Referred to as Intra-osseous Chondroma or	0.54
Differential Diagnosis Tables			A 9	Central Chondroma)	. 352
	fumors and tumorlike lesions involving the skull			Referred to as Periosteal or Juxtacortical Chondroma,	
1	and facial bones	18		Surface Chondroma, and Juxtacortical/Parosteal	
-3	Tumors and tumorlike lesions involving the spine	38		Chondroma)	359
2	Paraspinal tumors and tumorlike lesions,	64	A 10	Chondromyxoid Fibroma	
3 4	Lesions involving the outer surface of bone	76	A 11	Chondrosarcoma	
5	Lesions associated with thickening of bone cortex	104	A 12	Chordoma	
6	Intramedullary lesions associated with expansion			Dermatofibrosarcoma and Dermatofibrosarcoma	
U	of intact cortical margins	117		Protuberans	383
7	Intramedullary lesions associated with cortical	• • •	A 14	Dermatomyositis	
7	destruction and extraosseous extension	128		Dermoid and Epidermoid	
8	Solitary intramedullary lesions with well-	120		Desmoid Tumor (Also Referred to as Fibromatosis,	
9	circumscribed margins	140		Superficial and Deep Types Involving Soft Tissues;	
	Solitary intramedullary lesions with poorly	110		Desmoplastic Fibroma; Desmoid Tumor within Bone).	396
	defined margins of abnormal marrow signal	150	A 17		
	Solitary intramedullary lesions located near the	100		Eosinophilic Granuloma (Also Referred to as	
	ends of tubular bones	163		Langerhans Cell Histiocytosis, Formerly	
11	Solitary intramedullary metadiaphyseal lesions			Histiocytosis X)	406
12	Solitary intramedullary diaphyseal lesions		A 19	Erdheim-Chester Disease (Also Referred to as	
	Osseous tumors and tumorlike lesions at the	103		Chester–Erdheim Disease, Lipoid Granulomatosis,	
13	hands and feet	100		and Lipogranulomatosis)	413
14	Diffuse, multiple, poorly defined and/or multi-	133	A 20	Ewing Sarcoma	
14	focal zones of abnormal marrow signal	211	A 21	Nodular Fasciitis (Also Referred to as Pseudo-	
15	Lesions that contain cartilage		7121	sarcomatous Fasciitis, Proliferative Fasciitis,	
15 16	Tumors and tumorlike lesions within joints			Infiltrative Fasciitis, and Pseudosarcomatous	
		241		Fibromatosis)	423
17	Solitary tumors and tumorlike lesions ,		۸ ၁၁	Fibrolipomatous Hamartoma (Also Referred to as	74.7
	of the soft tissues located mostly deep to the	250	7.44	Nerve Lipoma, Neural Fibrolipoma, Lipofibromatous	
10	subcutaneous fat	236		Hamartoma, Perineural Lipoma, Intraneural Lipoma,	
18	Tumors and tumorlike lesions of the superficial	ายก		Lipofibroma, and Lipomatous Hamartoma)	426
10	soft tissues including subcutaneous fat		۸ ٦٦	Fibroma of the Tendon Sheath	
19	Lesions involving peripheral nervous tissue		A 24	Solitary Fibrous Tumor.	
20	Lesions that contain fat	312	A 25	Fibrosarcoma	
				Fibrous Cortical Defect and Nonossifying Fibroma	, 433
Atlas			A 20	(Also Referred to as Metaphyseal Fibrous Defect),	
				Cortical Desmoid (Also Referred to as Periosteal	
A 1	Adamantinoma (Also Referred to as Extragnathic			Desmoid or Distal Femoral Cortical Irregularity),	
	Adamantinoma, Adamantinoma of Long Bones,	205		and Fibroxanthoma (Also Referred to as Benign	
4.3	Juvenile Intracortical Adamantinoma)				430
A2	Aneurysmal Bone Cyst	328	A 77	Fibrous Dysplasia (Also Referred to as Fibro-	. 450
А3	Bone Cyst (Also Referred to as Simple Bone Cyst,	004	A 27	- 1	
	Unicameral Bone Cyst, Solitary Bone Cyst)	334		osseous Dysplasia, Fibrocartilaginous Dysplasia, and Lichtenstein-Jaffe Disease)	440
A 4	Angiofibroma (Also Referred to as Juvenile		A 30	Geode (Also Referred to as Subchondral Cyst and	. 1915
A E	Nasopharyngeal Angiofibroma)	340	A 28		
A 5	Angiomatoid Fibrous Histiocytoma (Also Referred	*		Osteoarthritic Cyst); Soft Tissue and Intra-osseous Ganglion (Also Referred to as Intra-osseous Ganglion.	
۸۰	to as Angiomatoid Malignant Fibrous Histiocytoma)	342		**	
A 6	Angiosarcoma (Also Referred to as Malignant		д по	Juxta-articular Bone Cyst, and Periosteal Ganglion)	
	Hemangioendothelioma, High-Grade Hemangio-			Giant Cell Tumor of Bone	, 1 02
	endothelioma, Hemangiosarcoma, Angioendo-		A 30	Soft Tissue (Also Referred to as Nodular Teno-	
	thelioma, Angiofibrosarcoma, and Hemangio-	2			
A 7	endotheliosarcoma)			synovitis, Fibrous Xanthoma, Tenosynovial	ACI
11.	Chondroblastoma	347		Giant Cell Tumor, and Benign Synovioma)	. 405

Δ 31	Glomus Tumor (Also Referred to as		A 54	Myxoma	624
,,,,	Glomangioma and Angioglomoid Tumor)	476		Neuroblastoma, Ganglioneuroblastoma, and	
A 32	Gout			Ganglioneuroma	627
	Hemangioendothelioma (Also Referred to as		A 56	Neurofibroma and Malignant Peripheral Nerve	
,	Low-grade Hemangioendothelioma, Low-grade			Sheath Tumor	633
	Hemangioendothelial Sarcoma, Low-grade		A 57	Traumatic Neuroma	642
	Angiosarcoma, and Myxoid Angioblastoma)	484	A 58	Osteochondroma (Also Referred to as Osteo-	
A 34	Hemangiomas (Also Referred to as Vascular			cartilaginous Exostosis)	645
	Hamartomas)	491	A 59	Osteofibrous Dysplasia (Also Referred to as	
A 35	Hemangiopericytoma			Ossifying Fibroma of the Tibia and/or Fibula,	
	Hematoma, Morel-Lavallee Lesion,			Cortical Fibrous Dysplasia)	654
	and Hemophilic Pseudotumor	507	A 60	Osteoid Osteoma	
A 37	Bone and Muscle Infarct (Also Referred to as		A 61	Osteoblastoma (Also Referred to as Ossifying	
	Avascular Necrosis and Osteonecrosis)	512		Giant Cell Tumor and Giant Osteoid Osteoma)	668
A 38			A 62	Osteoma, Enostosis, Osteopoikilosis, and	
	Multiplex, Kaposi Disease, Idiopathic Multiple			Melorheostosis	674
	Pigmented Sarcoma of the Skin, and Granuloma		A 63	Osteomyelitis	679
	Multiplex Hemorrhagicum)	519		Osteosarcoma (Also Referred to as Osteogenic	
A 39	Leiomyoma			Sarcoma and Osteoblastic Sarcoma)	693
A 40	Leiomyosarcoma		A 65	Paget Disease (Also Referred to as Osteitis	
A 41	Leukemia			Deformans)	713
A 42	Lipoblastoma		A 66	Paraganglioma (Also Referred to as Chemodectoma	
A 43	Lipoma, Atypical Lipoma, and Hibernoma			for Carotid Body Tumor and Glomus Jugulare	
A 44	Liposarcoma			Tumor for Jugulotympanic Paragangliomas)	721
A 45	Liposclerosing Myxofibrous Tumor (Also Referred		A 67	Pigmented Villonodular Synovitis	726
	to as Polymorphic Fibro-osseous Lesion of Bone		A 68	Pleomorphic Hyalinizing Angiectatic Tumor	730
	and Polymorphic Fibrocystic Disease of Bone)	563	A 69	Rhabdomyosarcoma (Also Referred to as	
A 46	Lymphangioma (Also Referred to as Cystic			Myosarcoma, Malignant Rhabdomyoma,	
	Hygroma)	566		Rhabdosarcoma, and Embryonal Sarcoma)	732
A 47	Lymphoma	570	A 70	Rheumatoid Arthritis	738
A 48	Malignant Fibrous Histiocytoma (Also Referred to as		A71	Sarcoid	744
	Malignant Histiocytoma, Xanthosarcoma, Malignant		A72	Schwannoma (Also Referred to as Neurilemoma	
	Fibrous Xanthoma, and Fibroxanthosarcoma)	584		and Neurinoma)	747
A 49	Meningioma	594	A 73	Synovial Chondromatosis (Also Referred to as	
A 50	Metastatic Lesions	601		Primary and Secondary Chondromatosis, and	
A 51	Morton Neuroma	609		Synovial Chondrometaplasia), and Synovial	
A 52	Multiple Myeloma (Also Referred to as Myeloma,			Osteochondromatosis	753
	Kahler Disease, and Plasma Cell Neoplasm;		A 74	Synovial Cyst	758
	Plasmacytoma Represents a Solitary Neoplastic		A 75	Synovial Sarcoma (Also Referred to as Carcino-	
	Variant)	611		sarcoma and Spindle Cell Carcinoma of Soft Tissue)	762
A 53	Myositis Ossificans (Also Referred to as		A 76	Teratoma	769
	Heterotopic Ossification, Reactive Mesenchymal		A 77	Xanthoma	773
	Proliferation, Ossifying Hematoma, and				
	Pseudomalignant Osseous Tumor of Soft Tissues)	618	Subj	ect Index	775