California Tumor Tissue Registry's
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"Soft Tissue Tumors: Fibroblastic/Myofibroblastic Part 2"

Case 1

51 y/o male with a slowly growing lump in the left shoulder x 6 months. It was attached to the fascia of the deltoid muscle. It was 5 x 4 x 3 cm, soft tan and mucoid.

Dx: Nodular fasciitis

Kong CS; Cha I. Nodular fasciitis: diagnosis by fine needle aspiration biopsy. Acta Cytol 2004 Jul-Aug;48(4): p473-7

Velagaleti GV; Tapper JK; Panova NE; Miettinen M; Gatalica Z. Cytogenetic findings in a case of nodular fasciitis of subclavicular region. Cancer Genet Cytogenet 2003 Mar;141(2): p160-3

Donner LR; Silva T; Dobin SM. Clonal rearrangement of 15p11.2, 16p11.2, and 16p13.3 in a case of nodular fasciitis: additional evidence favoring nodular fasciitis as a benign neoplasm and not a reactive tumefaction. Cancer Genet Cytogenet 2002 Dec;139(2): p138-40

Kayaselcuk F; Demirhan B; Kayaselcuk U; Ozerdem OR; Tuncer I. Vimentin, smooth muscle actin, desmin, S-100 protein, p53, and estrogen receptor expression in elastofibroma and nodular fasciitis. Ann Diagn Pathol 2002 Apr;6(2): p94-9

Silva P; Bruce IA; Malik T; Homer J; Banerjee S. Nodular fasciitis of the head and neck. J Laryngol Otol 2005 Jan;119(1): p8-11

Saqi A; Nassar A; Baloch Z. Nodular fasciitis. Diagn Cytopathol 2002 Jun;26(6): p407-8

Case 2

8 day old male baby had a 4 cm mass in the right cheek. Contributor called it a hemangiopericytoma.

Dx: Myopericytoma (Myofibroma)

Dray MS; McCarthy SW; Palmer AA; Bonar SF; Stalley PD; Marjoniemi V; Millar E; Scolyer RA. Myopericytoma: a unifying term for a spectrum of tumours that show overlapping features with myofibroma. A review of 14 cases. J Clin Pathol 2006 Jan;59(1): p67-73

Mentzel T; Dei Tos AP; Sapi Z; Kutzner H. Myopericytoma of skin and soft tissues: clinicopathologic and immunohistochemical study of 54 cases. Am J Surg Pathol 2006 Jan;30(1): p104-13

Mentzel T. Perivascular neoplasms of skin and soft tissues. A review. Pathologe 2005 Mar;26(2): p134-45

McMenamin ME; Fletcher CD. Malignant myopericytoma: expanding the spectrum of tumours with myopericytic differentiation. Histopathology 2002 Nov;41(5): p450-60

Case 3

Four y/o girl with rapidly growing mass in the lower back.

Dx: Calcifying Aponeurotic fibroma

Amaravati R. Rare malignant transformation of a calcifying aponeurotic fibroma. Comment On: Comment On: RefSource:J Bone Joint Surg Am. 2001 Apr; 83-A(4):586-8/PMID:11315790. J Bone Joint Surg Am 2002 Oct;84-A(10): p1889; author reply 1889

Parker WL; Beckenbaugh RR; Amrami KK. Calcifying aponeurotic fibroma of the hand: radiologic differentiation from giant cell tumors of the tendon sheath. J Hand Surg Am 2006 Jul-Aug;31(6): p1024-8

Sethi S; Mishra K; Rajni. Calcifying aponeurotic fibroma: a case report and review of literature. Indian J Pathol Microbiol 2003 Apr;46(2): p223-6

Kwak HS; Lee SY; Kim JR; Lee KB MR imaging of calcifying aponeurotic fibroma of the thigh. Pediatr Radiol 2004 May;34(5): p438-40

Hasegawa HK; Park S; Hamazaki M. Calcifying aponeurotic fibroma of the knee: A case report with radiological findings. J Dermatol 2006 Mar;33(3): p169-73

Case 4

2 cm nodule in the shoulder of a 40 y/o man.

Dx: Collagenous fibroma

Bernal K; Nelson M; Neff JR; Nielsen SM; Bridge JA. Translocation (2; 11)(q31; q12) is recurrent in collagenous fibroma (desmoplastic fibroblastoma). Cancer Genet Cytogenet 2004 Mar;149(2): p161-3

Alberghini M; Pasquinelli G; Zanella L; Bacchini P; Bertoni F. Desmoplastic fibroblastoma: a light and ultrastructural description of two cases. Ultrastruct Pathol 2004 May-Jun;28(3): p149-57

Nishio J; Iwasaki H; Nishijima T; Kikuchi M. Collagenous fibroma (desmoplastic fibroblastoma) of the finger in a child. Pathol Int 2002 Apr;52(4): p322-5

Tsunemi Y; Saeki H; Tamaki K. Nuchal fibroma clearly visualized by computed tomography: a case report. Int J Dermatol 2005 Aug;44(8): p703-4

Walker KR; Bui-Mansfield LT; Gering SA; Ranlett RD. Collagenous fibroma (desmoplastic fibroblastoma) of the shoulder. AJR Am J Roentgenol 2004 Dec;183(6): p1766

Hao S; Cherian R; Templeton KJ; Topalovski M; McGregor DH. Collagenous fibroma (desmoplastic fibroblastoma) of pectoralis minor muscle. Orthopedics 2003 Dec;26(12): p1227-8

Case 5

Tumor involving the rectus abdominis muscle in a 45 y/o woman.

Dx: Abdominal desmoid fibromatosis

Oguz M; Bedirli A; Gultekin A; Dursun A; Mentes BB. Desmoid tumor arising at the colostomy site after abdominoperineal resection for rectal carcinoma: report of a case. Dis Colon Rectum 2006 Sep;49(9): p1445-8

Okuno S. The enigma of desmoid tumors. Curr Treat Options Oncol 2006 Nov;7(6): p438-43

Sturt NJ; Phillips RK; Clark SK. High-dose tamoxifen and sulindac as first-line treatment for desmoid tumors. Comment On: RefSource:Cancer. 2004 Feb 1; 100(3):612-20/PMID:14745880. Cancer 2004 Aug 1;101(3): p652; author reply 653

Lucas DR; al-Abbadi M; Tabaczka P; Hamre MR; Weaver DW; Mott MJ. c-Kit expression in desmoid fibromatosis. Comparative immunohistochemical evaluation of two commercial antibodies. Am J Clin Pathol 2003 Mar;119(3): p339-45

Case 6

40 y/o female with a mesentery-based mass.

Dx: Mesenteric fibromatosis

Rodriguez JA; Guarda LA; Rosai J. Mesenteric fibromatosis with involvement of the gastrointestinal tract. A GIST simulator: a study of 25 cases. Am J Clin Pathol 2004 Jan;121(1): p93-8

Faria SC; Iyer RB; Rashid A; Ellis L; Whitman GJ. Desmoid tumor of the small bowel and the mesentery. AJR Am J Roentgenol 2004 Jul;183(1): p118

Ferenc T; Sygut J; Kopczynski J; Mayer M; Latos-Bielenska A; Dziki A; Kulig A. Aggressive fibromatosis (desmoid tumors): definition, occurrence, pathology, diagnostic problems, clinical behavior, genetic background. Pol J Pathol 2006;57(1): p5-15

Holubar S; Dwivedi AJ; O'Connor J. Giant mesenteric fibromatosis presenting as small bowel obstruction. Am Surg 2006 May;72(5): p427-9

Huerta S; Heubner DR; Marcus DR. Mesenteric fibromatosis in a young girl without familial adenomatous polyposis. J Pediatr Surg 2005 May;40(5): pe33-6

Montgomery E; Torbenson MS; Kaushal M; Fisher C; Abraham SC. Beta-catenin immunohistochemistry separates mesenteric fibromatosis from gastrointestinal

stromal tumor and sclerosing mesenteritis. Am J Surg Pathol 2002 Oct;26(10): p1296-301

Case 7

18 y/o male with bleeding from the mouth. A soft palate mass was found.

Dx: Nasopharangeal angiofibroma

Montag AG; Tretiakova M; Richardson M. Steroid hormone receptor expression in nasopharyngeal angiofibromas. Consistent expression of estrogen receptor beta. Am J Clin Pathol 2006 Jun;125(6): p832-7

McAfee WJ; Morris CG; Amdur RJ; Werning JW; Mendenhall WM. Definitive radiotherapy for juvenile nasopharyngeal angiofibroma. Am J Clin Oncol 2006 Apr;29(2): p168-70

Tosun F; Ozer C; Gerek M; Yetiser S. Surgical approaches for nasopharyngeal angiofibroma: comparative analysis and current trends. J Craniofac Surg 2006 Jan;17(1): p15-20

Patrocinio JA; Patrocinio LG; Borba BH; Bonatti Bde S; Guimaraes AH. Nasopharyngeal angiofibroma in an elderly woman. Am J Otolaryngol 2005 May-Jun;26(3): p198-200

Zhang PJ; Weber R; Liang HH; Pasha TL; Li Volsi VA. Growth factors and receptors in juvenile nasopharyngeal angiofibroma and nasal polyps: an immunohistochemical study. Arch Pathol Lab Med 2003 Nov;127(11): p1480-4

Case 8

88 y/o male with abdominal pain and a recent history of hemoptysis. Endoscopic examination showed a submucosal polypoid projection into the stomach. It was 4.8 cm. Negative for S100, SMA, Desmin and keratin. Positive for CD117.

Dx: Gastrointestinal Stromal Tumor (GIST)

Kawanowa K; Sakuma Y; Sakurai S; Hishima T; Iwasaki Y; Saito K; Hosoya Y; Nakajima T; Funata N. High incidence of microscopic gastrointestinal stromal tumors in the stomach. Hum Pathol 2006 Dec;37(12): p1527-35

Logrono R; Bhanot P; Chaya C; Cao L; Waxman I; Bhutani MS. Imaging, morphologic, and immunohistochemical correlation in gastrointestinal stromal tumors. Cancer 2006 Aug 25;108(4): p257-66

Gold JS; Dematteo RP. Combined surgical and molecular therapy: the gastrointestinal stromal tumor model. Ann Surg 2006 Aug;244(2): p176-84

Rubin BP. Gastrointestinal stromal tumours: an update. Histopathology 2006 Jan;48(1): p83-96

van der Zwan SM; De Matteo RP. Gastrointestinal stromal tumor: 5 years later. Cancer 2005 Nov 1;104(9): p1781-8

Case 9

Newborn girl with a right foot mass that prevented normal childbirth (approximately 20 cm). C-section was required and the foot lesion bled profusely. Foot was amputated.

Follow-up three years after surgery. No recurrence.

Dx: Congenital fibrosarcoma

Morerio C; Rapella A; Rosanda C; Tassano E; Conte M; Gambini C; Panarello C. Differential diagnosis of congenital fibrosarcoma. Cancer Genet Cytogenet 2004 Jul 15;152(2): p167-8

Nonaka D; Sun CC. Congenital fibrosarcoma with metastasis in a fetus. Pediatr Dev Pathol 2004 Mar-Apr;7(2): p187-91

Muzaffar AR; Friedrich JB; Lu KK; Hanel DP. Infantile fibrosarcoma of the hand associated with coagulopathy. Plast Reconstr Surg 2006 Apr 15;117(5): p81e-86e

Gu W; Ogose A; Kawashima H; Umezu H; Kudo N; Hotta T; Endo N. Congenital dermatofibrosarcoma protuberans with fibrosarcomatous and myxoid change. J Clin Pathol 2005 Sep;58(9): p984-6

Sandberg AA; Bridge JA. Updates on the cytogenetics and molecular genetics of bone and soft tissue tumors: congenital (infantile) fibrosarcoma and mesoblastic nephroma. Cancer Genet Cytogenet 2002 Jan 1;132(1): p1-13

Miura K; Han G; Sano M; Tsutsui Y. Regression of congenital fibrosarcoma to hemangiomatous remnant with histological and genetic findings. Pathol Int 2002 Sep;52(9): p612-8

Case 10

Tissues from a 19 y/o male:

1981 - arm lesion
1984 - tumor in lung and mastoid

Dx: Adult fibrosarcoma

Hansen T; Katenkamp K; Brodhun M; Katenkamp D. Low-grade fibrosarcoma--report on 39 not otherwise specified cases and comparison with defined low-grade fibrosarcoma types. Histopathology 2006 Aug;49(2): p152-60

Kim L; Park IS; Han JY; Kim JM; Chu YC. Aspiration cytology of fibrosarcomatous variant of dermatofibrosarcoma protuberans with osteoclastlike giant cells in the chest wall: a case report. Acta Cytol 2005 Nov-Dec;49(6): p644-9

Fisher C. Myofibroblastic malignancies. Adv Anat Pathol 2004 Jul;11(4): p190-201

O'Sullivan MJ; Sirgi KE; Dehner LP. Low-grade fibrosarcoma (hyalinizing spindle cell tumor with giant rosettes) with pulmonary metastases at

presentation: case report and review of the literature. Int J Surg Pathol 2002 Jul;10(3): p211-6

Vascellari M; Melchiotti E; Mutinelli F. Fibrosarcoma with typical features of postinjection sarcoma at site of microchip implant in a dog: histologic and immunohistochemical study. Vet Pathol 2006 Jul;43(4): p545-8

Bonus Case 11:

52 y/o woman with a 6 cm well-circumbscribed mass in the chest wall. CD34 +, calretinin -.

Dx: Solitary Fibrous Tumor/Hemangiopericytoma

Gengler C; Guillou L. Solitary fibrous tumour and haemangiopericytoma: evolution of a concept. Histopathology 2006 Jan;48(1): p63-74

Rakheja D; Molberg KH; Roberts CA; Jaiswal VR. Immunohistochemical expression of beta-catenin in solitary fibrous tumors. Arch Pathol Lab Med 2005 Jun;129(6): p776-9

Yoshida Y; Kubota Y; Yamaguchi T; Iwasaki H; Nakayama J. Subcutaneous solitary fibrous tumor. J Dermatol 2004 Dec;31(12): p1018-22

Huang HY; Sung MT; Eng HL; Lee TY; Ko SF; Wang CC; Chen WJ. Solitary fibrous tumor of the abdominal wall: a report of two cases immunohistochemical, flow cytometric, and ultrastructural studies and literature review. APMIS 2002 Mar;110(3): p253-62