

California Tumor Tissue Registry's
Subscription "C" - Vol 6(4)
January, 2013

"Dermatopathology"

Case 1:

A 48-year-old male noticed an enlargement in the left shoulder area and sought treatment. A mass consisting of two portions of firm lobulated tan tissue each approximating 2.0 cm in greatest diameter was excised. (Contributed by Phillip Gordon, M.D.; Winter Haven Hospital; Winter Haven, Florida.)

Santa Barbara (Miramonte Laboratory) - Metastatic carcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Mixed tumor benign / Mixed tumor of skin (Chondroid syringoma)
Woodland Hills (Kaiser Permanente) - Chondroid syringoma
Arkansas (The Lab of Pathology, P.A.) - Chondroid syringoma
Georgia, Atlanta - Chondroid syringoma
Illinois, Oak Brook - Cutaneous mixed tumor
Kansas (Peterson Laboratory Services) - Chondroid syringoma / Benign mixed tumor
Louisiana, Shreveport (LSU Health Shreveport) - Chondroid syringoma
Maryland, Baltimore - Chondroid syringoma
Michigan, Dearborn (Oakwood Hospital) - Chondroid syringoma
New Mexico, Albuquerque - Chondroid syringoma
Ohio, Columbus – Soft tissue, left shoulder, mixed tumor (Chondroid syringoma)
Texas, Victoria - Microcystic adnexal tumor
Hong Kong (Hong Kong Baptist Hospital) - Chondroid syringoma
The Netherlands, Amstelveen - Syringoma

Dx:

Chondroid syringoma, shoulder

Refs:

Cytologic features of chondroid syringoma in fine needle aspiration biopsies: a report of 3 cases.

Acta Cytol 2010 Mar-Apr;54(2): p183-6

Dubb M; Michelow P

Chondroid syringoma diagnosed by fine needle aspiration cytology.

Diagn Cytopathol 2010 Jan;38(1): p38-40

Kumar B

Chondroid syringoma with extensive ossification.

Int J Surg Pathol 2007 Oct;15(4): p385-7

Eccher A; Brunelli M, et al.

Giant benign chondroid syringoma of the cheek: case report and review of the literature.

J Oral Maxillofac Surg 2007 Sep;65(9): p1836-9

Schulhof Z; Anastassov GE, et al.

Chondroid syringoma. Cytokeratin 20 immunolocalization of Merkel cells and reappraisal of apocrine folliculo-sebaceous differentiation.

Arch Pathol Lab Med 2004 Sep;128(9): p986-90
Salama ME; Azam M, et al.

Pleomorphic adenoma (chondroid syringoma) on the face.
Otolaryngol Head Neck Surg 2004 Apr;130(4): p499-500
Chao PZ; Lee FP

Case 2:

A 32 y/o woman noticed an itchy bleb on her vulva.

Santa Barbara (Miramonte Laboratory) - Herpes
Santa Rosa (Santa Rosa Memorial Hospital) - Herpes simplex / Herpes genitalis / Herpes simplex virus vesicle
Woodland Hills (Kaiser Permanente) - Herpes simplex virus infection
Arkansas (The Lab of Pathology, P.A.) - HSV
Georgia, Atlanta - Herpes
Illinois, Oak Brook - Herpes simplex
Kansas (Peterson Laboratory Services) - Herpes simplex virus
Louisiana, Shreveport (LSU Health Shreveport) - Herpes
Maryland, Baltimore - Herpes genitalis
Michigan, Dearborn (Oakwood Hospital) - Herpetic ulcer
New Mexico, Albuquerque - Herpes simplex
Ohio, Columbus - Skin, vulva, cellular changes consistent with herpes virus infection
Texas, Victoria - Herpetic bleb
Hong Kong (Hong Kong Baptist Hospital) - Herpes simplex infection
The Netherlands, Amstelveen - Herpes viral infection

Dx:

Herpes infection, vulva

Refs:

Cervicovaginal secretions contribute to innate resistance to herpes simplex virus infection.

J Infect Dis 2005 Nov 15;192(10): p1731-40
John M; Keller MJ, et al.

Neonatal herpes should be a reportable disease.
Sex Transm Dis 2005 Sep;32(9): p521-5
Handsfield HH; Waldo AB, et al.

'Not proper to men alone': herpes before the discovery of AIDS.
Sex Transm Infect 2011 Dec;87(7): p582
du Boulay HH

Genital herpes in children under 11 years and investigations for sexual abuse.
Arch Dis Child 2011 Aug;96(8): p752-7
Reading R; Hughes G; Hill J; Debelle G

Condom use and genital herpes.

Case 3:

A 29 y/o man presented with a several year history of a 2.0 cm nodule on his lower back. A biopsy four years previously was diagnosed as dermatofibroma. Since then, the lesion recurred and continued to grow. The current lesion was CD34 positive. A review of the previous tumor ("dermatofibroma") included stellate giant cells, sometimes directly adjacent to blood vessels.

Santa Barbara (Miramonte Laboratory) - Kaposi patch stage
Santa Rosa (Santa Rosa Memorial Hospital) - Sclerotic fibroma (pleomorphic) (3)
Woodland Hills (Kaiser Permanente) - Giant cell fibroblastoma
Arkansas (The Lab of Pathology, P.A.) - Giant cell fibroblastoma
Georgia, Atlanta - Sclerotic fibroma
Illinois, Oak Brook - Solitary fibrous tumor
Kansas (Peterson Laboratory Services) - Giant cell fibroblastoma (2)
Louisiana, Shreveport (LSU Health Shreveport) - Sclerotic fibroma vs giant cell fibroblastoma
Maryland, Baltimore - Storiform collagenoma (sclerosing fibroma)
Michigan, Dearborn (Oakwood Hospital) - Giant cell fibroblastoma
New Mexico, Albuquerque - Dermatofibrosarcoma protuberans
Ohio, Columbus - Skin, lower back, fibroma with atypical stromal cells
Texas, Victoria - Multinucleated cell angiohistiocytoma
Hong Kong (Hong Kong Baptist Hospital) - collagenous fibroma
The Netherlands, Amstelveen - Pleomorphic fibroma?

Dx:

Giant cell fibroblastoma, lower back

Refs:

Giant cell fibroblastoma: an update and addition of 86 new cases from the Armed Forces Institute of Pathology, in honor of Dr. Franz M. Enzinger.

Ann Diagn Pathol 2007 Apr;11(2): p81-8

Jha P; Moosavi C; Fanburg-Smith JC

Dermatofibrosarcoma protuberans, giant cell fibroblastoma, and hybrid lesions in children: clinicopathologic comparative analysis of 28 cases with molecular data--a study from the French Federation of Cancer Centers Sarcoma Group.

Am J Surg Pathol 2003 Jan;27(1): p27-39

Terrier-Lacombe MJ; Guillou L, et al.

Dermatofibrosarcoma protuberans and giant cell fibroblastoma exhibit CD99 positivity.

J Cutan Pathol 2008 Jul;35(7): p647-50

Diwan AH; Skelton HG, et al.

Dermatofibrosarcoma protuberans recurring as a hybrid dermatofibrosarcoma/giant cell fibroblastoma in an adult: a case report.

J Plast Reconstr Aesthet Surg 2010 Nov;63(11): pe785-7

Warbrick-Smith J; Hollowood K; Birch J

Fine-needle aspiration cytology of giant cell fibroblastoma: case report and review of the literature.
Diagn Cytopathol 2002 Jun;26(6): p398-403
Layfield LJ; Gopez EV

Case 4:

A 59 y/o Filipino man presented with a lump in his mid-frontal scalp which he had noticed for the past 2 months. He had a history of rheumatoid arthritis, lupus erythematosus, and stomach ulcers. He also had a history of excessive smoking and drinking and reported "pinched nerves", "blackouts", dizziness and weight loss. A 2 cm diameter hard lump was present in his forehead. It was not ulcerated or fixed. CAM5.2, HMB-45 and AFB stains were negative. S-100 was positive.

Santa Barbara (Miramonte Laboratory) - Granular cell tumor
Santa Rosa (Santa Rosa Memorial Hospital) - ? Rosai Dorfman vs infection / Irritated benign spindle cell tumor possible nerve sheath tumor / Dendritic cell tumor
Woodland Hills (Kaiser Permanente) - Granular cell tumor
Arkansas (The Lab of Pathology, P.A.) - Granular cell tumor
Georgia, Atlanta - Rosai-Dorfman disease
Illinois, Oak Brook - Granuloma annulare
Kansas (Peterson Laboratory Services) - Rosai Dorfman / Granular cell tumor
Louisiana, Shreveport (LSU Health Shreveport) - Granular cell tumor
Maryland, Baltimore - Granular cell tumor
Michigan, Dearborn (Oakwood Hospital) - Necrobiotic xanthogranuloma
New Mexico, Albuquerque - Granular cell tumor
Ohio, Columbus - Soft tissue, mid frontal scalp, Rosai-Dorfman Disease
Texas, Victoria - Fibrohistiocytic tumor
Hong Kong (Hong Kong Baptist Hospital) - Rosai Dorfman disease
The Netherlands, Amstelveen - Neurofibroma?

Dx:

Granular cell tumor, forehead

Refs:

Granular cell tumor.
Am Surg 2011 Apr;77(4): pE76-7
Subramaniam S; Nagpal K; Niazi M; Gumbs M

Cytologic findings in granular cell tumors, with emphasis on the diagnosis of malignant granular cell tumor by fine-needle aspiration biopsy.

Cancer 2001 Dec 25;93(6): p398-408
Wieczorek TJ; Krane JF, et al.

Multiple granular cell tumour.

J Eur Acad Dermatol Venereol 2004 May;18(3): p347-9
Janouskova G; Campr V, et al.

Isolated and synchronous vulvar granular cell tumors: a clinicopathologic study of 17 cases in 13 patients.

Int J Gynecol Pathol 2010 Mar;29(2): p173-80
Papalas JA; Shaco-Levy R; Robboy SJ; Selim MA

Multiple hybrid granular cell tumor-perineuriomas.
Am J Surg Pathol 2008 Oct;32(10): p1572-7
Zarineh A; Costa ME; Rabkin MS

Case 5:

A 42 y/o woman had had numerous surgeries for skin nodules, mostly involving the scalp. These started appearing at age 2 1/2. Most recently she had a 8.0 x 6.5 x 3.5 cm yellow nodular mass on her scalp. It was solid, without zones of cyst formation or necrosis.

Santa Barbara (Miramonte Laboratory) - Neurofibroma
Santa Rosa (Santa Rosa Memorial Hospital) - Neurofibroma / Nerve sheath tumor c/w neurofibroma / Diffuse pigmented neurofibroma
Woodland Hills (Kaiser Permanente) - Neurofibroma
Arkansas (The Lab of Pathology, P.A.) - Neurofibroma
Georgia, Atlanta - Neurofibroma
Illinois, Oak Brook - Neurofibroma
Kansas (Peterson Laboratory Services) - Neurofibroma
Louisiana, Shreveport (LSU Health Shreveport) – Pigmented neurofibroma vs infantile myofibroma
Maryland, Baltimore - Neurofibroma
Michigan, Dearborn (Oakwood Hospital) - Diffuse neurofibroma
New Mexico, Albuquerque - Malignant peripheral nerve sheath tumor
Ohio, Columbus - Soft tissue, scalp, diffuse neurofibroma
Texas, Victoria - Neurofibroma (von Recklinghausens)
Hong Kong (Hong Kong Baptist Hospital) - Neurofibroma
The Netherlands, Amstelveen - Pigmented neurofibroma

Dx:

Pigmented neurofibroma, von Recks NF1-related, scalp

Refs:

Pigmented neurofibroma: report of two cases and literature review.
Pathol Int 2001 Jul;51(7): p565-9
Inaba M; Yamamoto T; Minami R; Ohbayashi C; Hanioka K

Enlarging congenital pigmented plaque. Neurofibroma.
Arch Dermatol 2004 Jun;140(6): p751-6
Mar WA; Bangert J; Hansen RC

Pigmented (melanotic) neurofibroma. Report of an unusual case with immunohistochemical, ultrastructural and cytogenetic analyses.
Pathol Res Pract 2002;198(2): p125-31
Kuhnen C; Herter P; Soimaru C; Homann HH; Johnen G

Pigmented neurofibroma: review of Japanese patients with an analysis of melanogenesis demonstrating coexpression of c-met protooncogene and microphthalmia-associated transcription factor.
Hum Pathol 2005 Aug;36(8): p871-7
Motoi T; Ishida T; Kawato A; Motoi N; Fukayama M

Case 6:

A 71 y/o woman noted a growing nodule on the surface of her right lateral thigh. It had been present approximately six months. Excision resulted in a skin ellipse encircling a 3.0 x 2.8 cm dome-shaped whorled nodule involving the dermis and subcutis. The nodule was firm, pale tan to focally red-yellow. It was NSE positive.

Santa Barbara (Miramonte Laboratory) - Neuroendocrine carcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Merkel cell tumor (3)
Woodland Hills (Kaiser Permanente) - Merkel cell carcinoma
Arkansas (The Lab of Pathology, P.A.) - Merkel cell carcinoma
Georgia, Atlanta - Merkel cell carcinoma
Illinois, Oak Brook - Merkel cell tumor
Kansas (Peterson Laboratory Services) - Merkel cell carcinoma (2)
Louisiana, Shreveport (LSU Health Shreveport) - Merkel cell carcinoma
Maryland, Baltimore - Merkel cell carcinoma
Michigan, Dearborn (Oakwood Hospital) - Merkel cell carcinoma
New Mexico, Albuquerque - Merkel cell carcinoma
Ohio, Columbus - Soft tissue, right lateral thigh, Merkel cell tumor
Texas, Victoria - Merkel cell carcinoma
Hong Kong (Hong Kong Baptist Hospital) - Merkel cell carcinoma
The Netherlands, Amstelveen - Merkel cell carcinoma

Dx:

Merkel cell carcinoma, thigh

Refs:

Recent advances in the biology of Merkel cell carcinoma.
Hum Pathol 2011 Aug;42(8): p1063-77
Kuwamoto S

Association of Merkel cell polyomavirus infection with morphologic differences in Merkel cell carcinoma.
Hum Pathol 2011 May;42(5): p632-40
Kuwamoto S; Higaki H, et al.

Five hundred patients with Merkel cell carcinoma evaluated at a single institution.
Ann Surg 2011 Sep;254(3): p465-73; discussion 473-5
Fields RC; Busam KJ, et al.

Contralateral metastasis of a cutaneous Merkel cell carcinoma: diagnosis by fine needle aspiration cytology.
Diagn Cytopathol 2005 Dec;33(6): p450-1
Daugherty HK; Rumboldt T; Hoda RS

Complete spontaneous regression of Merkel cell carcinoma.
Ann Otol Rhinol Laryngol 2005 May;114(5): p376-80
Junquera L; Torre A, et al.

Fine-needle aspiration cytology of Merkel cell carcinoma.
Diagn Cytopathol 2004 Nov;31(5): p364-5
Dey P; Jogai S, et al.

Case 7:

A 78 y/o man presented with erythema, roughening, and thickening of the perianal skin for 6 months. For several years, the man had fecal soilage of the perineum with chronic perianal dermatitis. The involved perianal skin was excised. No distinct nodule(s) were seen. Approximately 1 year after this excision, a mass arose in the same area which was read as poorly differentiated adenocarcinoma.

Santa Barbara (Miramonte Laboratory) - Pagets
Santa Rosa (Santa Rosa Memorial Hospital) - Pagets disease (3)
Woodland Hills (Kaiser Permanente) - Pagets disease
Arkansas (The Lab of Pathology, P.A.) - Extramammary Pagets disease
Georgia, Atlanta - Pagets disease
Illinois, Oak Brook - Pagets disease
Kansas (Peterson Laboratory Services) - Extramammary Pagets
Louisiana, Shreveport (LSU Health Shreveport) - Pagets disease with underlying invasive adenocarcinoma
Maryland, Baltimore - Anal Page's disease
Michigan, Dearborn (Oakwood Hospital) - Extramammary Pagets disease
New Mexico, Albuquerque - Paget disease
Ohio, Columbus - Skin, perianal, Pagets disease
Texas, Victoria - Mucinous adenocarcinoma
Hong Kong (Hong Kong Baptist Hospital) - Extramammary Pagets disease
The Netherlands, Amstelveen - Pagets disease

Dx:

Pagets disease, perianal skin

Refs:

Extra-mammary Paget's disease of the perianal region: a review of the literature emphasizing the operative management technique.
Surg Oncol 2011 Jun;20(2): pe61-71
Kyriazanos ID; Stamos NP; Miliadis L; Noussis G; Stoidis CN

Extra-mammary Paget's disease of the scrotum and penis: a case report.
Acta Chir Belg 2009 Nov-Dec;109(6): p808-10
Chang YM; Hsu KF; Chang SC

Mammary Paget's disease and extra-mammary Paget's disease: two morphologically similar but biologically different diseases.
J Cutan Pathol 2010 Nov;37(11): p1145-9
Liu W; Iqbal J; Khoury T

Paget's disease of the vulva: Diagnosis and follow-up key to management; a retrospective study of 50 cases from Queensland.
Gynecol Oncol 2011 Jul;122(1): p42-4
Jones IS; Crandon A; Sanday K

Quadruple extra-mammary Paget's disease.
Acta Derm Venereol 2007;87(1): p80-1
Abe S; Kabashima K; Nishio D; Yasuda H; Tokura Y

Case 8:

A 70 y/o woman presented with swelling of the right occipital scalp, present for seven months. A 4 x 2 cm pedunculated soft tissue mass was found in the right occipital region. The mass was excised under local anesthesia. The cut surface was pink to tan, whorled, and soft to rubbery.

Shortly after this excision, the patient noticed other skin nodules. A CT scan showed a "massive pelvic tumor". The patient died 6 months later.

S100, CK - negative

Desmin – positive

Santa Barbara (Miramonte Laboratory) - Leiomyosarcoma

Santa Rosa (Santa Rosa Memorial Hospital) - Metastatic leiomyosarcoma (2)/ Leiomyosarcoma

Woodland Hills (Kaiser Permanente) - Metastatic Leiomyosarcoma

Arkansas (The Lab of Pathology, P.A.) - Leiomyosarcoma

Georgia, Atlanta - Leiomyosarcoma

Illinois, Oak Brook - Leiomyosarcoma

Kansas (Peterson Laboratory Services) - Leiomyosarcoma (2)

Louisiana, Shreveport (LSU Health Shreveport) - Leiomyosarcoma

Maryland, Baltimore - Metastatic leiomyosarcoma

Michigan, Dearborn (Oakwood Hospital) - Leiomyosarcoma, likely metastatic

New Mexico, Albuquerque - Leiomyosarcoma

Ohio, Columbus - Soft tissue right occipital scalp, Leiomyosarcoma probably metastatic

Texas, Victoria - Metastatic leiomyosarcoma

Hong Kong (Hong Kong Baptist Hospital) - Leiomyosarcoma

The Netherlands, Amstelveen - Leiomyosarcoma

Dx:

Leiomyosarcoma, scalp, likely metastatic from pelvic tumor (found later)

Refs:

Cutaneous metastasis of leiomyosarcoma.

Dermatol Surg 2007 May;33(5): p634-7

Vandergriff T; Krathen RA; Orengo I

Primary cutaneous leiomyosarcoma: clinicopathological analysis of 36 cases.

Histopathology 2010 Jan;56(2): p251-62

Massi D; Franchi A, et al.

Cutaneous leiomyosarcoma: a tumor of the head and neck.

Dermatol Surg 2007 May;33(5): p628-33

Annest NM; Grekin SJ; Stone MS; Messingham MJ

Cutaneous skull metastasis from uterine leiomyosarcoma: a case report.

World J Surg Oncol 2009;7:45

Barbetakis N; Paliouras D, et al.

Superficial cutaneous leiomyosarcoma: a rare, misleading tumor.

Am J Clin Dermatol 2008;9(3): p185-7

De Giorgi V; Sestini S, et al.

Case 9:

A 66 y/o man presented with complaints of swelling and ulceration of his right little finger

for the past six months. He complained that it had not healed, and was instead getting worse. Past medical history included hypertension, myocardial infarction, and diabetes mellitus. The mass was 2.4 x 1.9 x 1.3 cm and was white tan.

Santa Barbara (Miramonte Laboratory) - Digital papillary adenocarcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Eccrine Carcinoma (3)
Woodland Hills (Kaiser Permanente) - Digital papillary adenocarcinoma
Arkansas (The Lab of Pathology, P.A.) - Aggressive digital papillary adenoma
Georgia, Atlanta - Aggressive digital adenocarcinoma
Illinois, Oak Brook - Eccrine tumor
Kansas (Peterson Laboratory Services) - Digital papillary carcinoma (2)
Louisiana, Shreveport (LSU Health Shreveport) - Adenoma
Maryland, Baltimore - Aggressive digital papillary adenocarcinoma
Michigan, Dearborn (Oakwood Hospital) - Papillary digital eccrine carcinoma
New Mexico, Albuquerque - Digital papillary adenocarcinoma
Ohio, Columbus - Skin/soft tissue, right little finger, adnexal carcinoma
Texas, Victoria - Aggressive digital pap. adenoca
Hong Kong (Hong Kong Baptist Hospital) - Atypical digital papillary adenoma
The Netherlands, Amstelveen - Adnexal tumor

Dx:

Aggressive digital papillary adenoma, finger

Refs:

Digital papillary adenoma (ADPA) and aggressive digital papillary adenocarcinoma (AdPACa).

Am J Dermatopathol 2005 Dec;27(6): p546-7; author reply 547
Gorva AD

Aggressive digital papillary adenocarcinoma: a case report and review of the literature.

Am J Dermatopathol 2001 Apr;23(2): p154-7
Jih DM; Elenitsas R; Vittorio CC; Berkowitz AR; Seykora JT

Aggressive digital papillary adenocarcinoma: a review.

Clin Exp Dermatol 2010 Mar;35(2): p113-9
Hsu HC; Ho CY, et al.

Aggressive digital papillary adenocarcinoma of the hand.

J Hand Surg Eur Vol 2007 Jun;32(3): p275-6
Rafee A; Prasad G; Phang S; Ramesh P

Aggressive digital papillary adenocarcinoma: a report of two diseases and review of the literature.

J Am Acad Dermatol 2009 Feb;60(2): p331-9
Frey J; Shimek C, et al.

Aggressive digital papillary adenocarcinoma.

Indian J Cancer 2011 Jan-Mar;48(1): p126-7
Rastrelli M; Soteldo J, et al.

Case 10:

This 59 y/o man, with a history of multiple pigmented macules, presented 4 years earlier

with a superficial 1.2 cm pigmented skin nodule involving the right abdominal wall (slide 10a). The current pigmented macule, four years later, involved the right shoulder (slides 10b1-b3).

Santa Barbara (Miramonte Laboratory) - Melanoma
Santa Rosa (Santa Rosa Memorial Hospital) - Desmoplastic melanoma / spindle cell melanoma
Woodland Hills (Kaiser Permanente) - Melanoma; sclerosing blue nevus
Arkansas (The Lab of Pathology, P.A.) - Desmoplastic melanoma
Georgia, Atlanta - Desmoplastic blue nevus
Illinois, Oak Brook - Malignant melanoma
Kansas (Peterson Laboratory Services) - Desmoplastic melanoma
Louisiana, Shreveport (LSU Health Shreveport) - Spindle cell melanoma
Maryland, Baltimore - Desmoplastic melanoma
Michigan, Dearborn (Oakwood Hospital) - Melanoma and metastatic melanoma
New Mexico, Albuquerque - Desmoplastic melanoma
Ohio, Columbus - Skin, right shoulder, malignant melanoma
Texas, Victoria - Melanoma
Hong Kong (Hong Kong Baptist Hospital) - Desmoplastic melanoma
The Netherlands, Amstelveen - Malignant melanoma

Dx:

Spindle cell melanoma, shoulder

Refs:

Desmoplastic and spindle cell melanomas express protein markers of the neural crest but not of later committed stages of Schwann cell differentiation.

J Cutan Pathol 2002 Oct;29(9): p562-8

Huttenbach Y; Prieto VG; Reed JA

New phenotypical and ultrastructural findings in spindle cell (desmoplastic/neurotropic) melanoma.

Appl Immunohistochem Mol Morphol 2003 Dec;11(4): p319-25

Winnepeninckx V; De Vos R, et al.

Nonpigmented intradermal malignant melanoma with cribriform, myxoid, and spindle cell growth patterns.

Am J Dermatopathol 2010 Dec;32(8): p829-31

Harmse D; Saunders S; Evans A

c-Kit expression in spindle cell melanoma--a diagnostic pitfall in anorectal biopsy.

Arch Pathol Lab Med 2009 Aug;133(8): p1189-91

Pelle MT; Parc Y; Mourra N

Diagnostic challenges of metastatic spindle cell melanoma on fine-needle aspiration specimens.

Cancer 2008 Apr 25;114(2): p94-101

Piao Y; Guo M; Gong Y

Spindle cell melanocytic lesions: part II--an approach to intradermal proliferations and horizontally oriented lesions.

J Clin Pathol 2010 May;63(5): p391-409

Sade S; Al Habeeb A; Ghazarian D

