



CALIFORNIA  
TUMOR TISSUE REGISTRY

## *HEAD AND NECK PATHOLOGY*

Minutes – Subscription B

September, 2013



### **SUGGESTED READING (General Topics from Recent Literature):**

Electronic medical record on anatomic pathology performance. *Am J Clin Pathol* 2013; 140:109-111. Renshaw AA and Gould ED.

Neuroendocrine carcinoma of the stomach: Morphologic and immunohistochemical characteristics and prognosis. *Am J Surg Pathol* 2013; 37:949-959. Ishida M, Sekine S, et al.

Validation of whole slide imaging for primary diagnosis in surgical pathology. *Arch Pathol Lab Med* 2013; 16: Epub ahead of print. Bauer TW, Schoenfield L, et al.

CD99 expression in merkel cell carcinoma: A case series with an unusual paranuclear dot-like staining pattern. *J Cutan Pathol* 2013; 40:19-24. Rajagopalan A and Browning D.

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## **FILE DIAGNOSES**

**CTTR Subscription B**

**September 2013**

**Case 1:**

Spindle cell lipoma, neck

**Case 2:**

Inverted Schneiderian papilloma, maxillary sinus

**Case 3:**

Carotid body paraganglioma, bifurcation of carotid artery

**Case 4:**

Paraganglioma (glomus jugulare), angle of the mandible

**Case 5:**

Squamous cell carcinoma, vocal cord

**Case 6:**

Adenoid cystic carcinoma, minor salivary gland

**Case 7:**

Canalicular adenoma, minor salivary gland

**Case 8:**

Low grade malignant myoepithelioma (myoepithelial carcinoma), neck

**Case 9:**

Epithelioid angiosarcoma, parotid gland

**Case 10:**

Plunging cervical ranula, neck

Glendale - Pleomorphic lipoma  
Orinda (Kaiser Permanente) - Atypical lipomatous tumor vs. spindle cell lipoma  
San Diego (Naval Medical Center) - Spindle cell lipoma/pleomorphic lipoma  
Colorado (Metropolitan Pathologists) - Spindle cell lipoma  
Delaware (Armed Forces Medical Examiner System) - Spindle cell lipoma  
Florida (Munroe Regional) - Dermatofibrosarcoma protuberans  
Georgia, Atlanta - Neurofibroma  
Illinois (Heartland Regional Medical Center) - Pleomorphic/spindle cell lipoma  
Illinois (Northwestern University) - Spindle cell lipoma  
Kansas (Peterson Laboratory Services) - Pleomorphic lipoma (1); Spindle cell lipoma (1)  
New York (St. Lukes Roosevelt Hospital) - Spindle cell lipoma  
New York (SUNY Downstate) - Spindle cell lipoma  
Oregon (Oregon Health and Science University Residents) - Spindle cell lipoma  
Pennsylvania (Drexel University College of Medicine Residents) - Lactation changes, fibrocystic changes  
Puerto Rico (University of Puerto Rico) - Spindle cell lipoma  
Tennessee, Knoxville - Spindle cell lipoma  
Texas (Baylor University Medical Center) - Spindle cell lipoma  
Texas, Lubbock - Spindle cell lipoma  
Wisconsin (Medical College of Wisconsin) - Pleomorphic lipoma vs. neurofibroma  
Canada (Pasqua Hospital) - Spindle cell lipoma  
Canada (University of Sherbrooke) - Spindle cell lipoma  
Japan (Asahi General Hospital) - Cutaneous myxoma (1); Angiomyolipoma (1)  
Japan (University of Yamanashi) - Spindle cell lipoma  
Saudi Arabia (King Khalid University Hospital) - Spindle cell lipoma  
United Kingdom (John Radcliffe Hospital) - Spindle cell/pleomorphic lipoma

**Case 1 - Diagnosis:**

Spindle cell lipoma, neck

**Director's comment:** Note the positive 34. (drc)

**Case 1 - References:**

Cutaneous CD34+ spindle cell neoplasms: Histopathologic features distinguish spindle cell lipoma, solitary fibrous tumor, and dermatofibrosarcoma protuberans.

Wood L; Fountaine TJ, et al.

*Am J Dermatopathol* 2010 Dec;32(8): p764-8

Multiple spindle cell lipomas and dermatofibrosarcoma protuberans within a single patient: evidence for a common neoplastic process of interstitial dendritic cells?

Harvell JD

*J Am Acad Dermatol* 2003 Jan;48(1): p82-5

Diagnostically challenging spindle cell lipomas: a report of 34 "low-fat" and "fat-free" variants.

Billings SD; Folpe AL

*Am J Dermatopathol* 2007 Oct;29(5): p437-42

Angiomatous spindle cell lipoma: Report of three cases with immunohistochemical and ultrastructural study and reappraisal of former 'pseudoangiomatous' variant.

Zamecnik M; Michal M  
*Pathol Int* 2007 Jan;57(1): p26-31

Fine needle aspiration of pleomorphic lipoma of the neck: report of two cases.  
Chen X; Yu K, et al.  
*Diagn Cytopathol* 2010 Mar;38(3): p184-7

**Case No. 2, Accession No. 28993**

**September 2013**

Glendale - Inverted Schneiderian papilloma with atypia  
Orinda (Kaiser Permanente) - Schneiderian papilloma  
San Diego (Naval Medical Center) - Inverted Schneiderian papilloma  
Colorado (Metropolitan Pathologists) - Schneiderian papilloma with invasive squamous carcinoma  
Delaware (Armed Forces Medical Examiner System) - Inverted Schneiderian papilloma  
Florida (Munroe Regional) - Inverted papilloma  
Georgia, Atlanta - Inverted (Schneiderian) papilloma  
Illinois (Heartland Regional Medical Center) - Inverted Schneiderian papilloma (with dysplasia)  
Illinois (Northwestern University) - Schneiderian papilloma (inverted type) with focal high grade dysplasia  
Kansas (Peterson Laboratory Services) - Inverted Schneiderian papilloma (2)  
New York (St. Lukes Roosevelt Hospital) - Inverted Schneiderian papilloma  
New York (SUNY Downstate) - Inverted papilloma with dysplasia  
Oregon (Oregon Health and Science University Residents) - Inverted papilloma with mild/moderate dysplasia  
Pennsylvania (Drexel University College of Medicine Residents) - Fibromatosis  
Puerto Rico (University of Puerto Rico) - Inverted papilloma with mild to moderate epithelial dysplasia  
Tennessee, Knoxville - Squamous papilloma with dysplasia  
Texas (Baylor University Medical Center) - Sinonasal papilloma, inverted, with atypia  
Texas, Lubbock - Squamous cell carcinoma  
Wisconsin (Medical College of Wisconsin) - Inverted papilloma  
Canada (Pasqua Hospital) - Sinonasal papilloma  
Canada (University of Sherbrooke) - Inverted papilloma (Schneiderian)  
Japan (Asahi General Hospital) - Inverted papilloma (2)  
Japan (University of Yamanashi) - Papillary squamous cell carcinoma  
Saudi Arabia (King Khalid University Hospital) - Inverted papilloma, ulcerated  
United Kingdom (John Radcliffe Hospital) - Nasal papilloma (inverted)

**Case 2 - Diagnosis:**

Inverted Schneiderian papilloma, maxillary sinus

**Case 2 - References:**

Sinonasal inverted papilloma: narrative review.  
Anari S; Carrie S  
*J Laryngol Otol* 2010 Jul;124(7): p705-15

Squamous cell carcinoma arising in an inverted papilloma.  
Visaya JM; Wu JM, et al.  
*Ear Nose Throat J* 2010 May;89(5): pE21-2

HPV DNA is associated with a subset of Schneiderian papillomas but does not correlate with p16(INK4a) immunoreactivity.

Shah AA; Evans MF, et al.

*Head Neck Pathol* 2010 Jun;4(2): p106-12

Loss of basal cell keratin 14 reflects increased risk of recurrence in surgically resected sinonasal inverted papilloma.

Gunia S; Liebe D; Koch S

*J Clin Pathol* 2008 Jun;61(6): p707-12

Histopathology of routine nasal polypectomy specimens: a review of 2,147 cases.

Garavello W; Gaini RM

*Laryngoscope* 2005 Oct;115(10): p1866-8

Cytologic-histologic correlations in the diagnosis of inverted sinonasal papilloma.

Gould VE; Manosca F, et al.

*Diagn Cytopathol* 2004 Mar;30(3): p201-7

Inverted papilloma of the nasal cavity and paranasal sinuses.

Mendenhall WM; Hinerman RW, et al.

*Am J Clin Oncol* 2007 Oct;30(5): p560-3

### **Case No. 3, Accession No. 17608**

**September 2013**

Glendale - Paraganglioma with sclerosis

Orinda (Kaiser Permanente) - Carotid body paraganglioma

San Diego (Naval Medical Center) - Sclerosing paraganglioma

Colorado (Metropolitan Pathologists) - Sclerosing paraganglioma

Delaware (Armed Forces Medical Examiner System) - Paraganglioma

Florida (Munroe Regional) - Paraganglioma

Georgia, Atlanta - Paraganglioma

Illinois (Heartland Regional Medical Center) - Carotid body paraganglioma

Illinois (Northwestern University) - Sclerosing paraganglioma

Kansas (Peterson Laboratory Services) - Paraganglioma (2)

New York (St. Lukes Roosevelt Hospital) - Paraganglioma

New York (SUNY Downstate) - Sclerosing paraganglioma

Oregon (Oregon Health and Science University Residents) - Carotid body tumor (paraganglioma)

Pennsylvania (Drexel University College of Medicine Residents) - Sclerosing adenoma

Puerto Rico (University of Puerto Rico) - Carotid body paraganglioma

Tennessee, Knoxville - Paraganglioma

Texas (Baylor University Medical Center) - Paraganglioma

Texas, Lubbock - Carotid body tumor

Wisconsin (Medical College of Wisconsin) - Paraganglioma

Canada (Pasqua Hospital) - Paraganglioma

Canada (University of Sherbrooke) - Carotid body paraganglioma

Japan (Asahi General Hospital) - Paraganglioma (2)

Japan (University of Yamanashi) - Paraganglioma

Saudi Arabia (King Khalid University Hospital) - Carotid body paraganglioma, locally invasive

United Kingdom (John Radcliffe Hospital) - Epithelioid hemangioendothelioma

### **Case 3 - Diagnosis:**

Carotid body paraganglioma, bifurcation of carotid artery

### **Case 3 - References:**

Bilateral carotid body paraganglioma.

Choong NW; Miles JM

*Mayo Clin Proc* 2004 May;79(5): p681

Surgical treatment of paragangliomas of the carotid bifurcation: results of 36 patients.

Kohler HF; Carvalho AL, et al.

*Head Neck* 2004 Dec;26(12): p1058-63

Carotid body tumor: review of the literature and report of a case with a rare sensorineural symptomatology.

Athanasίου A; Liappis CD, et al.

*J Oral Maxillofac Surg* 2007 Jul;65(7): p1388-93

Paragangliomas of the head and neck.

Pellitteri PK; Rinaldo A, et al.

*Oral Oncol* 2004 Jul;40(6): p563-75

Paraganglioma: carotid body tumor.

Wieneke JA; Smith A

*Head Neck Pathol* 2009 Dec;3(4): p303-6

Cytomorphologic spectrum in paraganglioma.

Varma K; Jain S; Mandal S

*Acta Cytol* 2008 Sep-Oct;52(5): p549-56

### **Case No. 4, Accession No. 19361**

**September 2013**

Glendale - Paraganglioma

Orinda (Kaiser Permanente) - Paraganglioma

San Diego (Naval Medical Center) - Oncocytoma

Colorado (Metropolitan Pathologists) - Glomus tumor

Delaware (Armed Forces Medical Examiner System) - Myoepithelioma

Florida (Munroe Regional) - Acinic cell carcinoma

Georgia, Atlanta - Paraganglioma

Illinois (Heartland Regional Medical Center) - Oncocytoma with clear cell areas

Illinois (Northwestern University) - Neuroendocrine tumor most likely parathyroid adenoma

Kansas (Peterson Laboratory Services) - Paraganglioma (2)

New York (St. Lukes Roosevelt Hospital) - Paraganglioma

New York (SUNY Downstate) - Glomus angioma

Oregon (Oregon Health and Science University Residents) - Low grade epithelioid neoplasm, favor PEComa

Pennsylvania (Drexel University College of Medicine Residents) - Fibrocystic changes with papillomatosis

Puerto Rico (University of Puerto Rico) - Clear cell oncocytoma

Tennessee, Knoxville - Paraganglioma vs. glomus tumor

Texas (Baylor University Medical Center) - Paraganglioma

Texas, Lubbock - Undifferentiated carcinoma

Wisconsin (Medical College of Wisconsin) - Paraganglioma

Canada (Pasqua Hospital) - Paranganglioma  
Canada (University of Sherbrooke) - Glomus tumor  
Japan (Asahi General Hospital) - Clear cell adenocarcinoma (1); Acinar cell carcinoma (1)  
Japan (University of Yamanashi) - Paranganglioma  
Saudi Arabia (King Khalid University Hospital) - Pecomma  
United Kingdom (John Radcliffe Hospital) - Parathyroid adenoma

#### **Case 4 - Diagnosis:**

Paranganglioma (glomus jugulare), angle of the mandible

#### **Case 4 - References:**

Glomus jugulare.

Suh JD; Balaker AE, et al.

*Ear Nose Throat J* 2011 Jan;90(1): p14

Glomus jugular foramen tumours. A review.

Huy PT; Duet M

*B-ENT* 2011;7 Suppl 17:67-75

Jugular foramen tumors: clinical characteristics and treatment outcomes.

Fayad JN; Keles B, et al.

*Otol Neurotol* 2010 Feb;31(2): p299-305

Glomus jugulare tumors: historical overview of the management of this disease.

Michael LM; Robertson JH

*Neurosurg Focus* 2004 Aug 15;17(2): pE1

#### **Case No. 5, Accession No. 31454**

**September 2013**

Glendale - High-grade mucoepidermoid carcinoma

Orinda (Kaiser Permanente) - Invasive squamous cell carcinoma

San Diego (Naval Medical Center) - Squamous cell carcinoma consistent with chronic sialadenitis

Colorado (Metropolitan Pathologists) - Basaloid squamous cell carcinoma

Delaware (Armed Forces Medical Examiner System) - Invasive squamous cell carcinoma

Florida (Munroe Regional) - Squamous cell carcinoma

Georgia, Atlanta - Squamous cell carcinoma

Illinois (Heartland Regional Medical Center) - Squamous cell carcinoma

Illinois (Northwestern University) - Mucoepidermoid carcinoma/squamous cell carcinoma

Kansas (Peterson Laboratory Services) - Mucoepidermoid carcinoma (2)

New York (St. Lukes Roosevelt Hospital) - Squamous cell carcinoma

New York (SUNY Downstate) - Squamous cell carcinoma

Oregon (Oregon Health and Science University Residents) - Invasive squamous cell carcinoma, moderately differentiated with focal keratinization

Pennsylvania (Drexel University College of Medicine Residents) - Lactational adenoma

Puerto Rico (University of Puerto Rico) - Squamous cell carcinoma, keratinizing, well-differentiated

Tennessee, Knoxville - Squamous cell carcinoma

Texas (Baylor University Medical Center) - Squamous cell carcinoma

Texas, Lubbock - Squamous cell carcinoma

Wisconsin (Medical College of Wisconsin) - Squamous cell carcinoma

Canada (Pasqua Hospital) - Squamous cell carcinoma

Canada (University of Sherbrooke) - Infiltrating squamous cell carcinoma  
Japan (Asahi General Hospital) - Mucoepidermoid carcinoma (1); Squamous cell carcinoma (1)  
Japan (University of Yamanashi) - Squamous cell carcinoma  
Saudi Arabia (King Khalid University Hospital) - Squamous cell carcinoma  
United Kingdom (John Radcliffe Hospital) - Adenosquamous carcinoma

#### **Case 5 - Diagnosis:**

Squamous cell carcinoma, vocal cord

#### **Case 5 - References:**

Squamous cell nose and a synchronous in-situ vocal cord carcinoma: a case report.  
Danielides V; Katotomichelakis M, et al.  
*B-ENT* 2007;3(1): p45-8

Squamous cell carcinoma masquerading as a vocal fold papilloma.  
Liu JC; Sulica L  
*Ear Nose Throat J* 2007 Oct;86(10): p594

Vocal fold cancer.  
Schultz P  
*Eur Ann Otorhinolaryngol Head Neck Dis* 2011 Dec;128(6): p301-8  
Pathologic effects of external-beam irradiation on human vocal folds.  
Berg EE; Kolachala V, et al.  
*Ann Otol Rhinol Laryngol* 2011 Nov;120(11): p748-54  
Histologic characterization of human scarred vocal folds.  
Hirano S; Minamiguchi S, et al.  
*J Voice* 2009 Jul;23(4): p399-407

**Case No. 6, Accession No. 14086**

**September 2013**

Glendale - Adenoid cystic carcinoma  
Orinda (Kaiser Permanente) - Adenoid cystic carcinoma  
San Diego (Naval Medical Center) - Adenoid cystic carcinoma  
Colorado (Metropolitan Pathologists) - Adenoid cystic carcinoma  
Delaware (Armed Forces Medical Examiner System) - Adenoid cystic carcinoma  
Florida (Munroe Regional) - Adenocystic carcinoma  
Georgia, Atlanta - Adenoid cystic carcinoma  
Illinois (Heartland Regional Medical Center) - Adenoid cystic carcinoma  
Illinois (Northwestern University) - Epithelial myoepithelial carcinoma and adenoid cystic carcinoma  
Kansas (Peterson Laboratory Services) - Adenoid cystic carcinoma (2)  
New York (St. Lukes Roosevelt Hospital) - Adenoid cystic carcinoma  
New York (SUNY Downstate) - Adenoid cystic carcinoma  
Oregon (Oregon Health and Science University Residents) - Adenoid cystic carcinoma  
Pennsylvania (Drexel University College of Medicine Residents) - Fibroadenoma  
Puerto Rico (University of Puerto Rico) - Salivary duct carcinoma  
Tennessee, Knoxville - Adenoid cystic carcinoma  
Texas (Baylor University Medical Center) - Epithelial myoepithelial carcinoma  
Texas, Lubbock - Adenoid cystic carcinoma



Wisconsin (Medical College of Wisconsin) - Adenoid cystic carcinoma  
Canada (Pasqua Hospital) - Epithelial myoepithelial carcinoma  
Canada (University of Sherbrooke) - Adenoid cystic carcinoma  
Japan (Asahi General Hospital) - Adenoid cystic carcinoma (2)  
Japan (University of Yamanashi) - Adenoid cystic carcinoma  
Saudi Arabia (King Khalid University Hospital) - Salivary duct carcinoma, cribriform variant  
United Kingdom (John Radcliffe Hospital) - Adenoid cystic carcinoma

#### **Case 6 - Diagnosis:**

Adenoid cystic carcinoma, minor salivary gland

#### **Case 6 - References:**

Sinonasal adenoid cystic carcinoma: the M. D. Anderson Cancer Center experience.  
Lupinetti AD; Roberts DB, et al.  
*Cancer* 2007 Dec 15;110(12): p2726-31

INTERESTING CASE: unusual presentation of adenoid cystic carcinoma of the maxillary antrum.  
Sabesan T; Brennan PA; Markus AF  
*Br J Oral Maxillofac Surg* 2006 Apr;44(2): p99

Adenoid cystic carcinoma of the salivary glands: a 20-year review with long-term follow-up.  
Khafif A; Anavi Y; Haviv J, et al.  
*Ear Nose Throat J* 2005 Oct;84(10): p662, 664-7

New criteria for cytologic diagnosis of adenoid cystic carcinoma.  
Hara H; Oyama T; Suda K  
*Acta Cytol* 2005 Jan-Feb;49(1): p43-50

Chemotherapy and targeted therapy in adenoid cystic carcinoma of the head and neck: a review.  
Papasprou G; Hoch S, et al.  
*Head Neck* 2011 Jun;33(6): p905-11

Adenoid cystic carcinoma.  
Jaso J; Malhotra R  
*Arch Pathol Lab Med* 2011 Apr;135(4): p511-5

Progressive genetic alterations of adenoid cystic carcinoma with high-grade transformation.  
Seethala RR; Cieply K, et al.  
*Arch Pathol Lab Med* 2011 Jan;135(1): p123-30

**Case No. 7, Accession No. 31531**

**September 2013**

Glendale - Canalicular adenoma  
Orinda (Kaiser Permanente) - Pleomorphic adenoma  
San Diego (Naval Medical Center) - Canalicular adenoma  
Colorado (Metropolitan Pathologists) - Basal cell adenoma, canalicular type  
Delaware (Armed Forces Medical Examiner System) - Basal cell adenoma  
Florida (Munroe Regional) - Polymorphous low grade adenoma  
Georgia, Atlanta - Canalicular adenoma

Illinois (Heartland Regional Medical Center) - Adenoid cystic carcinoma  
Illinois (Northwestern University) - Monomorphic adenoma  
Kansas (Peterson Laboratory Services) - PLGA (1); Cannalicular adenoma (1)  
New York (St. Lukes Roosevelt Hospital) - Adenoma with canalicular pattern  
New York (SUNY Downstate) - Canalicular adenoma  
Oregon (Oregon Health and Science University Residents) - Canalicular adenoma  
Pennsylvania (Drexel University College of Medicine Residents) - Phyllodes tumor (with malignant potential)  
Puerto Rico (University of Puerto Rico) - Basal cell adenoma  
Tennessee, Knoxville - Monomorphic adenoma  
Texas (Baylor University Medical Center) - Canalicular adenoma  
Texas, Lubbock - Adenoid cystic carcinoma  
Wisconsin (Medical College of Wisconsin) - Monomorphic adenoma  
Canada (Pasqua Hospital) - Basal cell adenoma  
Canada (University of Sherbrooke) - Canalicular adenoma  
Japan (Asahi General Hospital) - Adenoid cystic carcinoma (1); Glomangiopericytoma (1)  
Japan (University of Yamanashi) - Basal cell adenoma  
Saudi Arabia (King Khalid University Hospital) - Canalicular adenoma of minor salivary gland  
United Kingdom (John Radcliffe Hospital) - Polymorphous low grade adenocarcinoma

### **Case 7 - Diagnosis:**

Canalicular adenoma, minor salivary gland

### **Case 7 - References:**

Canalicular adenoma of a minor salivary gland on the palate: a case presentation.

Werder P; Altermatt H, et al.

*Quintessence Int* 2009 Sep;40(8): p623-6

Canalicular adenoma presenting as an asymptomatic swelling of the upper lip: a case report.

Azevedo LR; Dos Santos JN, et al.

*J Contemp Dent Pract* 2008;9(1): p91-7

Canalicular adenoma of the palate.

Yuce S; Uysal IO, et al.

*J Craniofac Surg* 2012 Sep;23(5): p396-8

Canalicular adenoma of the palate: case report and literature review.

Smullin SE; Fielding AF, et al.

*Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2004 Jul;98(1): p32-6

Canalicular adenoma.

Penner CR; Thompson L

*Ear Nose Throat J* 2005 Mar;84(3): p132

Canalicular adenoma of buccal mucosa.

Maamouri F; Bellil K, et al.

*Pathologica* 2007 Jun;99(3): p69-70

Glendale - Carcinoma  
Orinda (Kaiser Permanente) - Synovial sarcoma  
San Diego (Naval Medical Center) - Myoepithelial carcinoma, however stains support synovial sarcoma  
Colorado (Metropolitan Pathologists) - Polymorphous low grade carcinoma  
Delaware (Armed Forces Medical Examiner System) - Synovial sarcoma, biphasic  
Florida (Munroe Regional) - Myoepithelioma  
Georgia, Atlanta - Spindle cell tumor with thymus-like differentiation (SETTLE)  
Illinois (Heartland Regional Medical Center) - Epithelial, myoepithelial carcinoma  
Illinois (Northwestern University) - Cellular pleomorphic adenoma  
Kansas (Peterson Laboratory Services) - Mucoepidermoid carcinoma (1); Low grade mucoepidermoid carcinoma (1)  
New York (St. Lukes Roosevelt Hospital) - Myoepithelioma  
New York (SUNY Downstate) - Myoepithelial carcinoma  
Oregon (Oregon Health and Science University Residents) - Low grade adenocarcinoma, NOS  
Pennsylvania (Drexel University College of Medicine Residents) - Adenoid cystic carcinoma  
Puerto Rico (University of Puerto Rico) - Myoepithelial carcinoma  
Tennessee, Knoxville - Myoepithelioma carcinoma  
Texas (Baylor University Medical Center) - Myoepithelial predominant mixed tumor  
Texas, Lubbock - Mucoepidermoid carcinoma  
Wisconsin (Medical College of Wisconsin) - Myoepithelioma  
Canada (Pasqua Hospital) - Thymoma  
Canada (University of Sherbrooke) - Myoepithelial carcinoma  
Japan (Asahi General Hospital) - Myoepithelioma (2)  
Japan (University of Yamanashi) - Polymorphous low grade adenocarcinoma  
Saudi Arabia (King Khalid University Hospital) - Mucoepidermoid carcinoma, low grade  
United Kingdom (John Radcliffe Hospital) - Myoepithelial carcinoma

**Case 8 - Diagnosis:**

Low grade malignant myoepithelioma (myoepithelial carcinoma), neck

**Case 8 - References:**

Myoepithelial carcinoma arising in a pleomorphic adenoma of the parotid gland: report of a case with cytopathologic findings.

Parwani AV; Lujan G; Ali SZ

*Acta Cytol* 2006 Jan-Feb;50(1): p93-6

Cytopathologic analysis of stroma-poor salivary gland epithelial/myoepithelial neoplasms on fine needle aspiration.

Chen L; Ray N, et al.

*Acta Cytol* 2012;56(1): p25-33

Myoepithelial carcinoma: first case reported in the trachea.

Li Y; Wang J, et al.

*Pathol Int* 2012 Jan;62(1): p55-9

Myoepithelial carcinoma and epithelial-myoeplithelial carcinoma of the paranasal sinuses: two distinct entities.

Yang S

*APMIS* 2012 Jan;120(1): p83-4

Myoepithelioma of a minor salivary gland of the cheek: case report.  
Ferri E; Pavon I, et al.  
*Acta Otorhinolaryngol Ital* 2006 Feb;26(1): p43-6

Myoepithelioma of the soft tissue of the head and neck: a case report and review of the literature.  
Neto AG; Pineda-Daboin K; Luna MA  
*Head Neck* 2004 May;26(5): p470-3

Myoepithelial carcinoma of soft tissue: a case report.  
Tayal S; Suri V, et al.  
*Indian J Pathol Microbiol* 2007 Oct;50(4): p761-3

**Case No. 9, Accession No. 26423**

**September 2013**

Glendale - Angiosarcoma  
Orinda (Kaiser Permanente) - Angiosarcoma  
San Diego (Naval Medical Center) - Angiosarcoma  
Colorado (Metropolitan Pathologists) - Angiosarcoma  
Delaware (Armed Forces Medical Examiner System) - Epithelioid angiosarcoma  
Florida (Munroe Regional) - Angiosarcoma  
Georgia, Atlanta - Epithelioid angiosarcoma  
Illinois (Heartland Regional Medical Center) - Angiosarcoma, poorly differentiated  
Illinois (Northwestern University) - Angiosarcoma  
Kansas (Peterson Laboratory Services) - Angiosarcoma (2)  
New York (St. Lukes Roosevelt Hospital) - Angiosarcoma, epithelioid type  
New York (SUNY Downstate) - Epithelioid angiosarcoma  
Oregon (Oregon Health and Science University Residents) - Angiosarcoma  
Pennsylvania (Drexel University College of Medicine Residents) - Myoepithelial carcinoma  
Puerto Rico (University of Puerto Rico) - Angiosarcoma  
Tennessee, Knoxville - Angiosarcoma  
Texas (Baylor University Medical Center) - Angiosarcoma  
Texas, Lubbock - Angiosarcoma  
Wisconsin (Medical College of Wisconsin) - Angiosarcoma  
Canada (Pasqua Hospital) - Angiosarcoma  
Canada (University of Sherbrooke) - Angiosarcoma  
Japan (Asahi General Hospital) - Angiosarcoma (2)  
Japan (University of Yamanashi) - Angiosarcoma  
Saudi Arabia (King Khalid University Hospital) - Angiosarcoma  
United Kingdom (John Radcliffe Hospital) - Angiosarcoma

**Case 9 - Diagnosis:**

Epithelioid angiosarcoma, parotid gland

**Case 9 - References:**

Primary angiosarcoma of the non-irradiated parotid gland: a most uncommon, highly malignant tumor.  
Forton GE; Van Parys G; Hertveldt K  
*Eur Arch Otorhinolaryngol* 2005 Mar;262(3): p173-7

Angiosarcoma of the parotid gland arising in congenital nonirradiated hemangioma. A case with adverse outcome.  
Damiani S; Salfi NC, et al.  
*Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2004 Jun;97(6): p665-6

Primary angiosarcoma of the parotid gland arising from benign congenital hemangioma.  
Damiani S; Corti B, et al.  
*Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2003 Jul;96(1): p66-9

Oral and salivary gland angiosarcoma: a clinicopathologic study of 29 cases.  
Fanburg-Smith JC, Furlong MA; Childers EL  
*Mod Pathol* 2003 Mar;16(3): p263-71

**Case No. 10, Accession No. 26604**

**September 2013**

Glendale - Benign  
Orinda (Kaiser Permanente) - Branchial cleft cyst vs. mucocele  
San Diego (Naval Medical Center) - Ranula  
Colorado (Metropolitan Pathologists) - Lymphangioma  
Delaware (Armed Forces Medical Examiner System) - Neurofibroma  
Florida (Munroe Regional) - Seroma  
Georgia, Atlanta - Lymphangioma (cystic hygroma)  
Illinois (Heartland Regional Medical Center) - Benign cystic lesion  
Illinois (Northwestern University) - Pseudocyst with synovial metaplasia  
Kansas (Peterson Laboratory Services) - Branchial cleft cyst (2)  
New York (St. Lukes Roosevelt Hospital) - Ranula/mucocele  
New York (SUNY Downstate) - Ranula, plunging type  
Oregon (Oregon Health and Science University Residents) - Ateriovenous malformation  
Pennsylvania (Drexel University College of Medicine Residents) - Metastatic ductal carcinoma  
Puerto Rico (University of Puerto Rico) - Lymphangioma/vascular malformation  
Tennessee, Knoxville - Vascular malformation  
Texas (Baylor University Medical Center) - Lymphangioma  
Texas, Lubbock - Lymphangioma  
Wisconsin (Medical College of Wisconsin) - Mucocele  
Canada (Pasqua Hospital) - Lymphangioma  
Canada (University of Sherbrooke) - Pseudocyst (ranula)  
Japan (Asahi General Hospital) - Granular cell tumor (1); Solitary fibrous tumor (1)  
Japan (University of Yamanashi) - Hemangioma  
Saudi Arabia (King Khalid University Hospital) - Vascular malformation/hamartoma  
United Kingdom (John Radcliffe Hospital) - Ranula/tissue surrounding mucocele

**Case 10 - Diagnosis:**

Plunging cervical ranula, neck

**Case 10 - References:**

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