

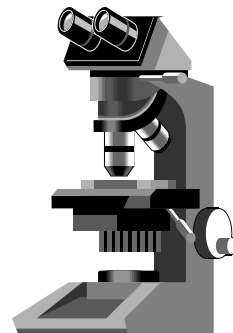


CALIFORNIA  
TUMOR TISSUE REGISTRY

## *HEAD AND NECK PATHOLOGY*

Minutes – Subscription A

October, 2002



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

Newly Described Adipocytic Lesions. Guillou L and Coindre JM. *Semin Diagn Pathol* 2001; 18(4):238-249.

Myoepithelial Tumors of Salivary Glands. A Clinicopathologic, Immunohistochemical, Ultrastructural and Flow Cytometric Study. Alos L, Cardesa A, Bombi JA, et al. *Semin Diagn Pathol* 1996; 13(2):138-147.

The Evolution of the Anatomic Pathologist from Medical Consultant to Information Specialist (Editorial). Murphy WM. *Am J Surg Pathol* 2002; 26(1):99-102.

The First Human Cloned Embryo. Cibelli JB, Lanza RP, West MD and Ezzell C. *Sci Am* 2002; 286(1):44-51.

California Tumor Tissue Registry  
c/o: Department of Pathology and Human Anatomy  
Loma Linda University School of Medicine  
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Web site & Case of the Month: [www.cttr.org](http://www.cttr.org)

## **FILE DIAGNOSES**

**CTTR Subscription A**

**October 2002**

**Case 1:**

Pleomorphic adenoma (“mixed tumor”) with degenerative changes, cheek  
T-Y0300, M-50030

**Case 2:**

Pleomorphic lipoma, neck  
T-Y0600, M-88500

**Case 3:**

Acinic cell carcinoma, parotid  
T-55100, M-85501

**Case 4:**

Salivary duct carcinoma, submandibular gland  
T-55300, M-80103

**Case 5:**

Myxomatous plexiform neurofibroma, region of mandible  
T-10180, M-95500

**Case 6:**

Low grade malignant myoepithelioma (myoepithelial carcinoma), neck  
T-Y0600, M-89820

**Case 7:**

Idiopathic orbital sclerosing inflammatory pseudotumor, right eye  
T-XX010, M-03090

**Case 8:**

Solitary fibrous tumor, nasal cavity  
T-21340, M-80001

**Case 9:**

Inverted Schneiderian papilloma, maxillary sinus  
T-22100, M-81210

**Case 10:**

Warthin’s tumor, parotid gland  
T-55100, M-85610

Bakersfield - Carotid body paraganglioma  
Baldwin Park (Kaiser Permanente) - Pleomorphic adenoma (2); Monomorphic adenoma (1)  
Bay Area - Monomorphic adenoma (cannot exclude pleomorphic areas) (3)  
Daly City (Seton Medical Center) - Monomorphic adenoma  
Fontana (Kaiser Permanente) - Pleomorphic adenoma  
Hayward/Fremont - Pleomorphic adenoma  
La Mesa - Pleomorphic adenoma  
Long Beach - Mixed tumor (7)  
Monterey (Community Hospital of Monterey Peninsula) - Mixed tumor  
Mountain View (El Camino Pathology Group) - Mixed tumor with degenerative features  
Oakland (Kaiser Permanente) - Pleomorphic adenoma (4)  
Orange (UCI Medical Center Residents) - Pleomorphic adenoma, cheek  
Sacramento (UC Davis Medical Center) - Pleomorphic adenoma  
San Diego (Naval Medical Center) - Pleomorphic adenoma  
Santa Barbara (Santa Barbara Cottage Hospital) - Pleomorphic adenoma  
Santa Rosa (Santa Rosa Memorial Hospital) - Mucoepidermoid tumor rule out pleomorphic adenoma (1); Pleomorphic adenoma (2)  
Ventura (Unilab) - Mixed tumor (2)  
Alaska (Alaska Native Medical Center) - Pleomorphic adenoma (mixed tumor) with prominent vascularity  
Alaska (Anchorage) - Mixed tumor  
Arizona (Phoenix Memorial Hospital) - Benign mixed tumor (pleomorphic adenoma)  
Florida (Munroe Regional Center) - Myoepithelioma  
Florida (Pathology Associates) - Benign mixed tumor  
Florida (Winter Haven Hospital) - Mixed tumor  
Indiana (Fort Wayne) - Pleomorphic adenoma, parotid  
Maryland (Johns Hopkins Hospital Residents) - Pleomorphic adenoma with prominent cystic vascular spaces (1); Myoepithelioma (1)  
Maryland (National Naval Medical Center) - Pleomorphic adenoma (10)  
Maryland (NIH Pathology Residents) - Pleomorphic adenoma  
Maryland (University of Maryland) - Monomorphic adenoma with degenerative changes  
Massachusetts (Brigham and Women's Residents/Fellows) - Pleomorphic adenoma (2)  
Massachusetts (New England Medical Center Residents) - Pleomorphic adenoma  
Michigan (Oakwood Hospital) - Canalicular adenoma  
Michigan (St. Joseph Mercy Hospital) - Monomorphic adenoma (2); Pleomorphic adenoma (1)  
Nebraska (Creighton University School of Medicine Residents) - Monomorphic adenoma  
New Jersey (Overlook Hospital) - Benign mixed tumor (3)  
New York (Impath) - Pleomorphic adenoma of salivary gland  
New York (Long Island Jewish Medical Center) - Benign salivary gland neoplasm, favor monomorphic adenoma  
New York (Nassau University Medical Center) - Cystic mixed tumor, parotid gland  
New York (Stony Brook University Hospital Residents) - Basal cell adenoma (12)  
New York (Westchester Medical Center) - Cystic mixed tumor  
Oklahoma (Tulsa) - Pleomorphic adenoma  
Pennsylvania (Allegheny General Hospital) - Pleomorphic adenoma  
Pennsylvania (Memorial Medical Center) - Mucoepidermoid carcinoma  
Pennsylvania (Shadyside Hospital) - Mixed tumor (pleomorphic adenoma) with hemorrhage and blood clots organizing  
Puerto Rico (University of Puerto Rico) - Pleomorphic adenoma  
Texas (ProPath Services) - Low grade muco-epidermoid carcinoma (2)  
Texas (Scott & White Memorial Hospital) - Pleomorphic adenoma  
West Virginia (Greenbrier Valley Medical Center) - Pleomorphic adenoma  
Wisconsin (Meriter Health Services) - Basal cell adenoma  
Australia (North Queensland Pathology) - Pleomorphic adenoma  
Hong Kong (Hong Kong Baptist Hospital) - Pleomorphic adenoma

Ireland (St. James Hospital) - Pleomorphic adenoma  
Qatar (Hamad Medical Corporation) - Pleomorphic adenoma, infarction

**Case 1 - Diagnosis:**

Pleomorphic adenoma (“mixed tumor”) with degenerative changes, cheek  
T-Y0300, M-50030

**Case 1 – References:**

Spiro RH. Salivary Neoplasms, Overview of 35 Years of Experience with 2807 Patients. *Head Neck Surg* 1986; 8(3):177-184.  
Stenman G, Sahlin P, Mark J and Landys D. Structural Alterations of the c-mos Locus in Benign Pleomorphic Adenomas with Chromosomal Abnormalities of 8q12. *Oncogene* 1991; 6(7):1105-1108.  
Klijanienko J and Vielh P. Fine-Needle Sampling of Salivary Gland Lesions. I. Cytology and Histology Correlation of 412 Cases of Pleomorphic Adenoma. *Diagn Cytopathol* 1996; 14(3):195-200.  
Takai Y, Mori M, Dardick I, MacKay A, Leung R, et al. Myofilament Localization and Immunoelectron Microscopic Detection of Muscle-Specific Actin in Neoplastic Myoepithelial Cells in Pleomorphic Adenomas and Myoepitheliomas. *Ultrastruct Pathol* 1994; 18(6):575-591.  
Martin AR, Mantravadi J, Kothylo PK, et al. Proliferative Activity and Aneuploidy in Pleomorphic Adenomas of the Salivary Glands. *Arch Pathol Lab Med* 1994; 118(3):252-259.

**Case No. 2, Accession No. 29122**

**October 2002**

Bakersfield - Well-differentiated liposarcoma  
Baldwin Park (Kaiser Permanente) - Pleomorphic lipoma (3)  
Bay Area - Atypical lipoma (3)  
Daly City (Seton Medical Center) - Spindle cell lipoma, pleomorphic lipoma  
Fontana (Kaiser Permanente) - Atypical lipomatous tumor  
Hayward/Fremont - Pleomorphic lipoma  
La Mesa (Grossmont Hospital) - Pleomorphic liposarcoma  
Long Beach - Well-differentiated liposarcoma (7)  
Monterey (Community Hospital of Monterey Peninsula) - Atypical lipoma  
Mountain View (El Camino Pathology Group) - Pleomorphic lipoma  
Oakland (Kaiser Permanente) - Pleomorphic lipoma (4)  
Orange (UCI Medical Center Residents) - Atypical lipomatous tumor, neck  
Sacramento (UC Davis Medical Center) - Pleomorphic lipoma  
San Diego (Naval Medical Center) - Atypical lipomatous tumor (10); Pleomorphic lipoma (1)  
Santa Barbara (Santa Barbara Cottage Hospital) - Atypical lipomatous tumor  
Santa Rosa (Santa Rosa Memorial Hospital) - Atypical lipoma, low-grade liposarcoma (1); Well-differentiated liposarcoma (1); Pleomorphic liposarcoma (1)  
Ventura (Unilab) - Atypical lipomatous tumor (2)  
Alaska (Alaska Native Medical Center) - Pleomorphic lipoma  
Alaska (Anchorage) - Atypical lipomatous tumor  
Arizona (Phoenix Memorial Hospital) - Pleomorphic lipoma  
Florida (Munroe Regional Center) - Pleomorphic lipoma  
Florida (Pathology Associates) - Atypical lipoma  
Florida (Winter Haven Hospital) - Atypical lipoma  
Indiana (Fort Wayne) - Atypical lipoma, right neck  
Maryland (Johns Hopkins Hospital Residents) - Pleomorphic lipoma if lesion is superficial, well-differentiated liposarcoma if lesion is deep (1); Pleomorphic liposarcoma (1)  
Maryland (National Naval Medical Center) - Pleomorphic lipoma (10)  
Maryland (NIH Pathology Residents) - Liposarcoma, well differentiated  
Maryland (University of Maryland) - Well-differentiated liposarcoma  
Massachusetts (Brigham and Women’s Residents/Fellows) - Pleomorphic lipoma (2)  
Massachusetts (New England Medical Center Residents) - Atypical lipoma  
Michigan (Oakwood Hospital) - Well-differentiated liposarcoma, atypical lipoma in subcutis

Michigan (St. Joseph Mercy Hospital) - Pleomorphic lipoma  
Nebraska (Creighton University School of Medicine Residents) - Atypical lipomatous tumor  
New Jersey (Overlook Hospital) - Lipoma (1); Pleomorphic lipoma (1); Atypical lipoma (1)  
New York (Impath) - Atypical lipoma  
New York (Long Island Jewish Medical Center) - Atypical lipoma, well-differentiated liposarcoma  
New York (Nassau University Medical Center) - Liposarcoma, neck  
New York (Stony Brook University Hospital Residents) - Atypical lipoma, well-differentiated liposarcoma (12)  
New York (Westchester Medical Center) - Atypical lipomatous tumor  
Oklahoma (Tulsa) - Atypical pleomorphic lipoma  
Pennsylvania (Allegheny General Hospital) - Pleomorphic lipoma  
Pennsylvania (Memorial Medical Center) - Pleomorphic liposarcoma  
Pennsylvania (Shadyside Hospital) - Pleomorphic lipoma  
Puerto Rico (University of Puerto Rico) - Well-differentiated liposarcoma/pleomorphic lipoma  
Texas (ProPath Services) - Pleomorphic lipoma (2)  
Texas (Scott & White Memorial Hospital) - Pleomorphic lipoma  
West Virginia (Greenbrier Valley Medical Center) - Atypical lipoma  
Wisconsin (Meriter Health Services) - Pleomorphic lipoma vs. well-differentiated (lipoma-like) liposarcoma  
Australia (North Queensland Pathology) - Atypical lipomatous tumour  
Hong Kong (Hong Kong Baptist Hospital) - Pleomorphic lipoma  
Ireland (St. James Hospital) - Pleomorphic lipoma  
Qatar (Hamad Medical Corporation) - Atypical lipomatous tumor

#### **Case 2 - Diagnosis:**

Pleomorphic lipoma, neck

Director's Note: Inadvertently omitted from the history was mention of CD34 positivity, and a superficial location (drc)

T-Y0600, M-88500

#### **Case 2 - References:**

Rubin BP and Dal Cin P. The Genetics of Lipomatous Tumors. *Semin Diagn Pathol* 2001; 18(4):286-293.  
 Pitt MA, Roberts IS and Curry A. Spindle Cell and Pleomorphic Lipoma. An Ultrastructural Study. *Ultrastruct Pathol* 1995; 19(6):475-480.  
 Yue XH and Liu YQ. Pleomorphic Lipoma. *Am J Surg Pathol* 1996; 20(7):898-899.  
 Verghese A, Smith RA, Stock D, et al. Aspiration Cytology of a Pleomorphic Lipoma-A Cautionary Note. *Cytopathol* 1999; 10(4):280-282.  
 Dal Cin P, Sciort R, Polito P, et al. Lesions of 13q May Occur Independently of Deletion of 16q in Spindle Cell/Pleomorphic Lipomas. *Histopathol* 1997; 31(3):222-225.

#### **Case No. 3, Accession No. 29108**

**October 2002**

Bakersfield - Acinic cell carcinoma  
Baldwin Park (Kaiser Permanente) - Metastatic lymphoepithelial carcinoma (1); Metastatic carcinoma (adenocarcinoma) vs. lymphoepithelial carcinoma (1); Lymphoepithelial carcinoma ? metastatic (1)  
Bay Area - Lymphoepithelial carcinoma (3)  
Daly City (Seton Medical Center) - Polymorphous low grade carcinoma; acinic cell with benign lymphoid stroma  
Fontana (Kaiser Permanente) - Poorly differentiated adenocarcinoma  
Hayward/Fremont - Lymphoepithelioma-like carcinoma  
La Mesa (Grossmont Hospital) - Mucoepidermoid carcinoma, high grade, with lymphoid infiltrate  
Long Beach - Lymphoepithelioma-like carcinoma (5); Mucoepidermoid carcinoma (2)  
Monterey (Community Hospital of Monterey Peninsula) - Lymphoepithelial carcinoma  
Mountain View (El Camino Pathology Group) - Lymphoepithelioma-like carcinoma  
Oakland (Kaiser Permanente) - Acinic cell carcinoma (1); Adenocarcinoma, NOS (3)  
Orange (UCI Medical Center Residents) - Lymphoepithelial-like carcinoma, parotid gland

Sacramento (UC Davis Medical Center) - Malignant lymphoepithelial lesion

San Diego (Naval Medical Center) - Lymphoepithelial carcinoma (5); Sebaceous lymphadenocarcinoma (5); Poorly differentiated adenocarcinoma (1)

Santa Barbara (Santa Barbara Cottage Hospital) - Poorly differentiated carcinoma, nasopharyngeal type

Santa Rosa (Santa Rosa Memorial Hospital) - Mucoepidermoid carcinoma (3)

Ventura (Unilab) - Poorly differentiated adenocarcinoma in intraparotid lymph node (2)

Alaska (Alaska Native Medical Center) - Malignant lymphoepithelial lesion, malignant lymphoepithelioma, lymphoepithelial carcinoma

Alaska (Anchorage) - Benign lymphoepithelial lesion

Arizona (Phoenix Memorial Hospital) - Carcinoma ex-pleomorphic adenoma

Florida (Munroe Regional Center) - Lymphoepithelial carcinoma

Florida (Pathology Associates) - Mucoepidermoid carcinoma

Florida (Winter Haven Hospital) - Undifferentiated carcinoma ex lymphoepithelial lesion

Indiana (Fort Wayne) - Lymphoepithelial carcinoma, parotid

Maryland (Johns Hopkins Hospital Residents) - Lymphoepithelial carcinoma, malignant lymphoepithelial lesion vs. metastatic nasopharyngeal carcinoma (1); Acinic cell adenocarcinoma (1)

Maryland (National Naval Medical Center) - Poorly differentiated carcinoma with features of lymphoepithelial-like carcinoma (9); Carcinoma, ex pleomorphic adenoma (2)

Maryland (NIH Pathology Residents) - Undifferentiated nasopharyngeal carcinoma, lymphoepithelial carcinoma

Maryland (University of Maryland) - Acinic cell carcinoma (it could be derived from pleomorphic adenoma)

Massachusetts (Brigham and Women's Residents/Fellows) - Acinic cell carcinoma (2)

Massachusetts (New England Medical Center Residents) - Acinic cell carcinoma, favorable prognosis variant

Michigan (Oakwood Hospital) - Acinic cell carcinoma

Michigan (St. Joseph Mercy Hospital) - Acinic cell carcinoma

Nebraska (Creighton University School of Medicine Residents) - Acinic cell adenocarcinoma

New Jersey (Overlook Hospital) - Acinic cell tumor (1); ? oncocytoma (1); Polymorphous low grade carcinoma (1)

New York (Impath) - Lymphoepithelioma-like carcinoma of salivary gland

New York (Long Island Jewish Medical Center) - Carcinoma arising from benign lymphoepithelial lesion

New York (Nassau University Medical Center) - Lymphoepithelial carcinoma, parotid gland

New York (Stony Brook University Hospital Residents) - Acinic cell carcinoma "favorable prognosis" variant (12)

New York (Westchester Medical Center) - Lymphoepithelial carcinoma

Oklahoma (Tulsa) - Acinic cell adenocarcinoma with lymphoid stroma

Pennsylvania (Allegheny General Hospital) - Adenocarcinoma

Pennsylvania (Memorial Medical Center) - Lymphoepithelial carcinoma

Pennsylvania (Shadyside Hospital) - Acinic cell adenocarcinoma

Puerto Rico (University of Puerto Rico) - Malignant lymphoepithelial lesion

Texas (ProPath Services) - Acinic cell carcinoma (2)

Texas (Scott & White Memorial Hospital) - Mucoepidermoid carcinoma

West Virginia (Greenbrier Valley Medical Center) - Lymphoepithelial carcinoma

Wisconsin (Meriter Health Services) - Non-keratinizing squamous cell carcinoma, lymphoepithelioma

Australia (North Queensland Pathology) - Lymphoepithelial carcinoma

Hong Kong (Hong Kong Baptist Hospital) - Malignant lymphoepithelioma

Ireland (St. James Hospital) - Mucoepidermoid carcinoma, exclude acinic cell carcinoma

Qatar (Hamad Medical Corporation) - Mucoepidermoid carcinoma

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

Acinic Cell Carcinoma, parotid  
T-55100, M-85501

Consultation: Mia Perez, M.D., Loma Linda, "Acinic cell carcinoma."

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

Abrams AM, Carnyn J and Scofield LS. Acinic Cell Adenocarcinoma of the Major Salivary Glands. A Clinicopathologic Study of 77 Cases. *Cancer* 1965; 18:1145-1162.

Angeles-Angeles A, Caballero-Mendoza E, Tapia-Rangel B, et al. Giant Acinic Cell Parotid Gland Adenocarcinoma of the Papillary Cystic Type. *Rev Invest Clin* 1998; 50(3):245-248.

Henley JD, Geary WA, Jackson CL, et al. Dedifferentiated Acinic Cell Carcinoma of the Parotid Gland. A Distinct Rarely Described Entity. *Hum Pathol* 1997; 28(7):869-873.

Hellquist HB, Sundelin K, Di Bacco A, et al. Tumour Growth Fraction and Apoptosis in Salivary Gland Acinic Cell Carcinomas. Prognostic Implications of Ki-67 and bcl-2 Expression and of In-situ End Labelling (TUNEL) *J Pathol* 1997; 181(3):323-329.

Depowski PL, Setzen G, Chui A, et al. Familial Occurrence of Acinic Cell Carcinoma of the Parotid Gland. *Arch Pathol Lab Med* 1999; 123(11):1118-1120.

## Case No. 4, Accession No. 29106

October 2002

Bakersfield - Salivary intraductal carcinoma

Baldwin Park (Kaiser Permanente) - Salivary duct carcinoma (3)

Bay Area - Salivary duct adenocarcinoma (3)

Daly City (Seton Medical Center) - Salivary duct carcinoma

Fontana (Kaiser Permanente) - Salivary duct adenocarcinoma

Hayward/Fremont - Salivary duct carcinoma

La Mesa (Grossmont Hospital) - Salivary duct carcinoma

Long Beach - Salivary duct carcinoma (7)

Monterey (Community Hospital of Monterey Peninsula) - Salivary duct carcinoma (? oncocytic)

Mountain View (El Camino Pathology Group) - Salivary duct carcinoma

Oakland (Kaiser Permanente) - Salivary gland duct carcinoma (4)

Orange (UCI Medical Center Residents) - Adenocarcinoma, NOS, submandibular gland

Sacramento (UC Davis Medical Center) - Salivary duct carcinoma

San Diego (Naval Medical Center) - Salivary duct carcinoma

Santa Barbara (Santa Barbara Cottage Hospital) - Salivary gland duct carcinoma

Santa Rosa (Santa Rosa Memorial Hospital) - Salivary duct carcinoma, comedo carcinoma (2); Salivary duct carcinoma (1)

Ventura (Unilab) - Salivary duct carcinoma (2)

Alaska (Alaska Native Medical Center) - Salivary duct carcinoma

Alaska (Anchorage) - Adenocarcinoma

Arizona (Phoenix Memorial Hospital) - Salivary duct carcinoma

Florida (Munroe Regional Center) - Salivary gland duct carcinoma

Florida (Pathology Associates) - Salivary duct carcinoma

Florida (Winter Haven Hospital) - Salivary duct carcinoma

Indiana (Fort Wayne) - Mucoepidermoid carcinoma, right submandibular gland

Maryland (Johns Hopkins Hospital Residents) - Salivary duct carcinoma (2)

Maryland (National Naval Medical Center) - Salivary duct carcinoma (11)

Maryland (NIH Pathology Residents) - Salivary duct carcinoma

Maryland (University of Maryland) - Salivary duct carcinoma

Massachusetts (Brigham and Women's Residents/Fellows) - Salivary duct carcinoma (2)

Massachusetts (New England Medical Center Residents) - Salivary duct carcinoma

Michigan (Oakwood Hospital) - Salivary duct carcinoma

Michigan (St. Joseph Mercy Hospital) - Ductal carcinoma

Nebraska (Creighton University School of Medicine Residents) - Salivary duct carcinoma, comedo type

New Jersey (Overlook Hospital) - Cribriform ductal adenocarcinoma (2); Mucoepidermoid carcinoma (1)

New York (Impath) - Salivary gland duct carcinoma

New York (Long Island Jewish Medical Center) - Salivary duct carcinoma, comedo type

New York (Nassau University Medical Center) - Ductal carcinoma, submandibular gland

New York (Stony Brook University Hospital Residents) - Salivary duct carcinoma (12)

New York (Westchester Medical Center) - Salivary duct carcinoma

Oklahoma (Tulsa) - Duct cell type adenocarcinoma

Pennsylvania (Allegheny General Hospital) - Ductal carcinoma

Pennsylvania (Memorial Medical Center) - Salivary duct carcinoma  
Pennsylvania (Shadyside Hospital) - Salivary duct carcinoma  
Puerto Rico (University of Puerto Rico) - Salivary duct carcinoma  
Texas (ProPath Services) - High grade muco-epidermoid carcinoma (2)  
Texas (Scott & White Memorial Hospital) - Salivary duct carcinoma  
West Virginia (Greenbrier Valley Medical Center) - Basaloid squamous cell carcinoma  
Wisconsin (Meriter Health Services) - Infiltrating salivary duct carcinoma with cribriform pattern  
Australia (North Queensland Pathology) - Intraduct and ? early invasive salivary duct carcinoma  
Hong Kong (Hong Kong Baptist Hospital) - Carcinoma with comedo necrosis  
Ireland (St. James Hospital) - Salivary duct carcinoma  
Qatar (Hamad Medical Corporation) - Salivary duct carcinoma

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

Salivary duct carcinoma, submandibular gland  
 T-55300, M-80103

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

Fan CY, Wang J and Barnes EL. Expression of Androgen Receptor and Prostatic Specific Markers in Salivary Duct Carcinoma. An Immunohistochemical Analysis of 13 Cases and Review of the Literature. *Am J Surg Pathol* 2000; 24(4):579-586.  
 Khurana KK, Pitman MB, Powers CN, Korourian S, et al. Diagnostic Pitfalls of Aspiration Cytology of Salivary Duct Carcinoma. *Cancer* 1997; 81(6):373-378.  
 Wick MR, Ockner DM, Mills SE, et al. Homologous Carcinomas of the Breasts, Skin, and Salivary Glands. A Histologic and Immunohistochemical Comparison of Ductal Mammary Carcinoma, Ductal Sweat Gland Carcinoma, and Salivary Duct Carcinoma. *Am J Clin Pathol* 1999; 109(1):75-84.  
 Moriki T, Ueta S, Takahashi T, Mitani M, et al. Salivary Duct Carcinoma Cytologic Characteristics and Application of Androgen Receptor Immunostaining for Diagnosis. *Cancer* 2001; 93(5):344-350.  
 Regauer S, Beham A, and Mannweiler S. CK7 Expression in Carcinomas of the Waldeyer's Ring Area. *Hum Pathol* 2000; 31(9):1096.

#### **Case No. 5, Accession No. 29438**

**October 2002**

Bakersfield - Neurofibroma  
Baldwin Park (Kaiser Permanente) - Plexiform neurofibroma (3)  
Bay Area - Plexiform neurofibroma, possibly within a hamartoma (3)  
Daly City (Seton Medical Center) - Plexiform neurofibroma  
Fontana (Kaiser Permanente) - Plexiform neurofibroma  
Hayward/Fremont - Plexiform neurofibroma  
La Mesa (Grossmont Hospital) - Plexiform neurofibroma  
Long Beach - Plexiform neurofibroma (7)  
Monterey (Community Hospital of Monterey Peninsula) - Plexiform neurofibroma  
Mountain View (El Camino Pathology Group) - Plexiform neurofibroma  
Oakland (Kaiser Permanente) - Plexiform neurofibroma (4)  
Orange (UCI Medical Center Residents) - Plexiform neurofibroma, right mandibular, parotid region  
Sacramento (UC Davis Medical Center) - Plexiform neurofibroma  
San Diego (Naval Medical Center) - Plexiform neurofibroma  
Santa Barbara (Santa Barbara Cottage Hospital) - Plexiform neurofibroma  
Santa Rosa (Santa Rosa Memorial Hospital) - Plexiform neurofibroma rule out low-grade neurofibrosarcoma (1); Plexiform neurofibroma (2)  
Ventura (Unilab) - Amputation neuroma (2)  
Alaska (Alaska Native Medical Center) - Plexiform neurofibroma  
Alaska (Anchorage) - Myxoid nerve sheath tumor  
Arizona (Phoenix Memorial Hospital) - Plexiform neurofibroma with myxoid degeneration  
Florida (Munroe Regional Center) - Neurofibroma  
Florida (Pathology Associates) - Plexiform neurofibroma



Florida (Winter Haven Hospital) - Plexiform neurofibroma  
Indiana (Fort Wayne) - Plexiform neurofibroma with myxoid degeneration  
Maryland (Johns Hopkins Hospital Residents) - Plexiform neurofibroma, patient likely has neurofibromatosis (1); Plexiform neurofibroma (1)  
Maryland (National Naval Medical Center) - Plexiform neurofibroma (11)  
Maryland (NIH Pathology Residents) - Plexiform neurofibroma  
Maryland (University of Maryland) - Plexiform neurofibroma  
Massachusetts (Brigham and Women's Residents/Fellows) - Plexiform neurofibroma (2)  
Massachusetts (New England Medical Center Residents) - Plexiform neurofibroma  
Michigan (Oakwood Hospital) - Plexiform neurofibroma  
Michigan (St. Joseph Mercy Hospital) - Plexiform neurofibroma  
Nebraska (Creighton University School of Medicine Residents) - Plexiform neurofibromatosis  
New Jersey (Overlook Hospital) - Plexiform neurofibroma (3); With focal goblet cells (1)  
New York (Impath) - Plexiform neurofibroma of salivary gland  
New York (Long Island Jewish Medical Center) - Neurofibroma, plexiform type  
New York (Nassau University Medical Center) - Nerve sheath myxoma, right mandibular, parotid region  
New York (Stony Brook University Hospital Residents) - Plexiform neurofibroma, recurrent (12)  
New York (Westchester Medical Center) - Plexiform neurofibroma  
Oklahoma (Tulsa) - Plexiform neurofibroma  
Pennsylvania (Allegheny General Hospital) - Plexiform neurofibroma  
Pennsylvania (Memorial Medical Center) - Plexiform neurofibroma  
Pennsylvania (Shadyside Hospital) - Plexiform neurofibroma  
Puerto Rico (University of Puerto Rico) - Plexiform neurofibroma  
Texas (Propath Services) - Plexiform neurofibroma (1); Plexiform neurofibroma (Von Recklinghausen's) (1)  
Texas (Scott & White Memorial Hospital) - Plexiform neurofibroma  
West Virginia (Greenbrier Valley Medical Center) - Necrotizing sialometaplasia  
Wisconsin (Meriter Health Services) - Plexiform neurofibroma  
Australia (North Queensland Pathology) - Myxoid neurofibroma  
Hong Kong (Hong Kong Baptist Hospital) - Plexiform neurofibroma  
Ireland (St. James Hospital) - Plexiform neurofibroma  
Qatar (Hamad Medical Corporation) - Plexiform neurofibroma

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

Myxomatous plexiform neurofibroma, region of mandible  
 T-10180, M-95500

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

Riccardi VM. Neurofibromatosis, Past, Present, and Future. *N Engl J Med* 1991(18); 324:1283-1285.  
 Mulvihill JJ, Parry DM, Sherman JL, et al. NIH Conference. Neurofibromatosis 1 (Recklinghausen Disease) and Neurofibromatosis 2 (Bilateral Acoustic-Neurofibromatosis) an Update. *Ann Intern Med* 1990; 113(1):39-52.  
 Derekoy S and Sefali M. Plexiform Neurofibroma of the Submandibular Gland. *J Laryngol Otol* 2000; 114(8):643-645.  
 Needle MN, Cnaan A, Dattilo J, et al. Prognostic Signs in the Surgical Management of Plexiform Neurofibroma. The Children's Hospital of Philadelphia Experience 1974-1994. *J Pediatr* 1997; 131(5):678-682.  
 Perry A, Roth KA, Banerjee R, et al. NF1 Deletions in S-100 Protein-Positive and Negative Cells of Sporadic and Neurofibromatosis 1 (NF1)-Associated Plexiform Neurofibromas and Malignant Peripheral Nerve Sheath Tumors. *Am J Pathol* 2001; 159(1):57-61.

**Case No. 6, Accession No. 29544**

**October 2002**

Bakersfield - Malignant mixed tumor  
Baldwin Park (Kaiser Permanente) - Mucoepidermoid carcinoma (1); Chordoma (1); Low grade mucoepidermoid carcinoma (1)  
Bay Area - Mucoepidermoid carcinoma (2); Adenocarcinoma, NOS, possibly epithelial-myoepithelial or ex-pleomorphic (1)  
Fontana (Kaiser Permanente) - Epithelial myoepithelial carcinoma

Hayward/Fremont - Mucoepidermoid carcinoma, low grade  
La Mesa (Grossmont Hospital) - Cystadenocarcinoma  
Long Beach - Mixed tumor, predominantly myoepithelial (7)  
Monterey (Community Hospital of Monterey Peninsula) - Myoepithelioma  
Mountain View (El Camino Pathology Group) - Monomorphic adenoma  
Oakland (Kaiser Permanente) - Pleomorphic adenoma (2); Malignant mixed tumor (1)  
Orange (UCI Medical Center Residents) - Mucoepidermoid carcinoma, neck  
Sacramento (UC Davis Medical Center) - Mucoepidermoid carcinoma  
San Diego (Naval Medical Center) - Mucoepidermoid carcinoma (5); Pleomorphic adenoma (5); Acinic cell carcinoma (1)  
Santa Barbara (Santa Barbara Cottage Hospital) - Mucoepidermoid carcinoma, poorly differentiated  
Santa Rosa (Santa Rosa Memorial Hospital) - Mucoepidermoid carcinoma (2); Myoepithelial carcinoma (1)  
Ventura (Unilab) - Mucoepidermoid carcinoma (2)  
Alaska (Alaska Native Medical Center) - Polymorphous low grade adenocarcinoma  
Alaska (Anchorage) - Pleomorphic adenoma  
Arizona (Phoenix Memorial Hospital) - Mucoepidermoid carcinoma  
Florida (Munroe Regional Center) - Myoepithelioma  
Florida (Pathology Associates) - Myoepithelioma  
Florida (Winter Haven Hospital) - Mixed tumor  
Indiana (Fort Wayne) - Adenocarcinoma, left neck  
Maryland (Johns Hopkins Hospital Residents) - Mucoepidermoid carcinoma (1); Chordoma (1)  
Maryland (National Naval Medical Center) - Acinic cell carcinoma (7); Adenosquamous carcinoma (2); Mucoepidermoid carcinoma (2); Carcinoma, NOS (1)  
Maryland (NIH Pathology Residents) - Mucoepidermoid carcinoma, low grade  
Maryland (University of Maryland) - Adenomyoepithelioma  
Massachusetts (Brigham and Women's Residents/Fellows) - Myoepithelioma (2)  
Massachusetts (New England Medical Center Residents) - Adenocarcinoma with myoepithelial differentiation  
Michigan (Oakwood Hospital) - Mucoepidermoid carcinoma, low grade  
Michigan (St. Joseph Mercy Hospital) - Mucoepidermoid carcinoma  
Nebraska (Creighton University School of Medicine Residents) - Mucoepidermoid carcinoma  
New Jersey (Overlook Hospital) - Benign mixed tumor (2); Consistent with epidermoid metaplasia (1); ? myoepithelioma (1)  
New York (Impath) - Myoepithelioma (of salivary gland)  
New York (Long Island Jewish Medical Center) - Myoepithelial neoplasm, uncertain malignant potential  
New York (Nassau University Medical Center) - Mucoepidermoid carcinoma, left neck  
New York (Stony Brook University Hospital Residents) - Mucoepidermoid carcinoma, intermediate grade (12)  
New York (Westchester Medical Center) - Adenocarcinoma, NOS vs. acinic cell carcinoma  
Oklahoma (Tulsa) - Pleomorphic adenoma  
Pennsylvania (Allegheny General Hospital) - Acinic cell carcinoma  
Pennsylvania (Memorial Medical Center) - Polymorphous low grade adenocarcinoma  
Pennsylvania (Shadyside Hospital) - Low grade adenocarcinoma, NOS  
Puerto Rico (University of Puerto Rico) - Mucoepidermoid carcinoma  
Texas (ProPath Services) - Mucoepidermoid carcinoma (1) Mucoepidermoid carcinoma high grade (1)  
Texas (Scott & White Memorial Hospital) - Cellular mixed tumor  
West Virginia (Greenbrier Valley Medical Center) - Synovial sarcoma  
Wisconsin (Meriter Health Services) - Myoepithelioma  
Australia (North Queensland Pathology) - Mucoepidermoid carcinoma; Diff Dx: Polymorphous low grade adenocarcinoma  
Hong Kong (Hong Kong Baptist Hospital) - Mucoepidermoid carcinoma  
Ireland (St. James Hospital) - Mucoepidermoid carcinoma  
Qatar (Hamad Medical Corporation) - Pleomorphic adenoma

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

Low grade malignant myoepithelioma (myoepithelial carcinoma), neck  
 T-Y0600, M-89820

Consultation: Mia Perez M.D., Loma Linda, "Low grade malignant myoepithelioma."

#### Case 6 - References:

- El-Naggar A, Batsakis JG, Luna MA, et al. DNA Content and Proliferative Activity of Myoepitheliomas. *J Laryngol Otol* 1989; 103:1192-1197.
- Dardick I, Cavell S, Boivin M, et al. Salivary Gland Myoepithelioma Variants. Histological, Ultrastructural and Immunocytologic Features. *Virchows Arch A Pathol Anat Histopathol* 1989; 416(1):25-42.
- Takeda Y. Malignant Myoepithelioma of Minor Salivary Gland Origin. *Acta Pathol Jpn* 1992; 42(7):518-522.
- Prasad AR, Saveria AT, Gown AM, et al. The Myoepithelial Immunophenotype in 135 Benign and Malignant Salivary Gland Tumors Other Than Pleomorphic Adenoma. *Arch Pathol Lab Med* 1999; 123(9):801-806.
- Saveria AT, Sloman A, Huvos AG, et al. Myoepithelial Carcinoma of the Salivary Glands. A Clinicopathologic Study of 25 Patients. *Am J Surg Pathol* 2000; 24(6):761-774.

#### Case No. 7, Accession No. 29443

October 2002

- Bakersfield - Inflammatory pseudotumor vs. dermoid fibromatosis
- Baldwin Park (Kaiser Permanente) - Inflammatory pseudotumor (3)
- Bay Area - Adenocarcinoma of the lacrimal gland (3)
- Daly City (Seton Medical Center) - Inflammatory pseudotumor doubt amyloid
- Fontana (Kaiser Permanente) - Inflammatory pseudotumor
- Hayward/Fremont - Hairy cell leukemia (1); Pseudotumor (1); Myeloma (1)
- La Mesa (Grossmont Hospital) - Inflammatory pseudotumor (would also do amyloid stain to rule out that possibility)
- Long Beach - Inflammatory pseudotumor (7)
- Monterey (Community Hospital of Monterey Peninsula) - Eccrine carcinoma (1); Plasmacytoid MALToma with amyloid (1)
- Mountain View (El Camino Pathology Group) - Inflammatory pseudotumor
- Oakland (Kaiser Permanente) - Amyloid (3); Orbital pseudotumor (1)
- Orange (UCI Medical Center Residents) - Inflammatory pseudotumor, sclerosing type, eye
- Sacramento (UC Davis Medical Center) - Inflammatory pseudotumor (5); Lymphoma (5)
- San Diego (Naval Medical Center) - Inflammatory pseudotumor
- Santa Barbara (Santa Barbara Cottage Hospital) - Idiopathic orbital inflammatory (pseudotumor)
- Santa Rosa (Santa Rosa Memorial Hospital) - Plasma cell dyscrasia with amyloid (1); Orbital inflammatory pseudotumor (1); Inflammatory pseudotumor of orbit (1)
- Ventura (Unilab) - Inflammatory pseudotumor (2)
- Alaska (Alaska Native Medical Center) - Inflammatory pseudotumor
- Alaska (Anchorage) - Amyloid nodule
- Arizona (Phoenix Memorial Hospital) - Sclerosing large cell lymphoma
- Florida (Munroe Regional Center) - Inflammatory pseudotumor
- Florida (Pathology Associates) - Inflammatory pseudotumor
- Florida (Winter Haven Hospital) - Idiopathic sclerosing inflammatory orbital pseudotumor
- Indiana (Fort Wayne) - Fibrous pseudotumor, right orbit
- Maryland (Johns Hopkins Hospital Residents) - Inflammatory pseudotumor, rule out Grave's disease (1); Orbital pseudotumor (1)
- Maryland (National Naval Medical Center) - Inflammatory pseudotumor (11)
- Maryland (NIH Pathology Residents) - Favor plasmacytoma, rule out multiple myeloma
- Maryland (University of Maryland) - Idiopathic orbital inflammation, inflammatory pseudotumor
- Massachusetts (Brigham and Women's Residents/Fellows) - Inflammatory pseudotumor, spectrum of IMT? (1); Inflammatory pseudotumor (1)
- Massachusetts (New England Medical Center Residents) - Inflammatory pseudotumor
- Michigan (Oakwood Hospital) - Inflammatory pseudotumor
- Michigan (St. Joseph Mercy Hospital) - Inflammatory myofibroblastic pseudotumor
- Nebraska (Creighton University School of Medicine Residents) - Marginal cell lymphoma
- New Jersey (Overlook Hospital) - Inflammatory pseudotumor (2); Sjogren's syndrome (1)
- New York (Impath) - Inflammatory pseudotumor of orbit
- New York (Long Island Jewish Medical Center) - Sclerosing idiopathic orbit inflammation, pseudotumor
- New York (Nassau University Medical Center) - Hyalinized angiofibroma, right eye

New York (Stony Brook University Hospital Residents) - Idiopathic sclerosing inflammation of the orbit (12)  
New York (Westchester Medical Center) - Inflammatory pseudotumor vs. low grade MALT lymphoma  
Oklahoma (Tulsa) - Pseudotumor, idiopathic orbital inflammation  
Pennsylvania (Allegheny General Hospital) - Inflammatory pseudotumor, inflammatory myofibroblastic tumor  
Pennsylvania (Memorial Medical Center) - Orbital pseudotumor  
Pennsylvania (Shadyside Hospital) - Angiofollicular hyperplasia (Castleman's disease)  
Puerto Rico (University of Puerto Rico) - Inflammatory pseudotumor  
Texas (ProPath Services) - Lymphoepithelioma (1); Malignant lymphoepithelial lesion (1)  
Texas (Scott & White Memorial Hospital) - Inflammatory pseudotumor  
West Virginia (Greenbrier Valley Medical Center) - Orbital inflammatory pseudotumor  
Wisconsin (Meriter Health Services) - Inflammatory pseudotumor of orbit  
Australia (North Queensland Pathology) - Inflammatory pseudotumor of orbit  
Hong Kong (Hong Kong Baptist Hospital) - Solitary fibrous tumor of orbit  
Ireland (St. James Hospital) - Inflammatory pseudotumor (consider Castleman's lymphoma)  
Qatar (Hamad Medical Corporation) - Inflammatory pseudotumor

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

Idiopathic orbital sclerosing inflammatory pseudotumor, right eye  
T-XX010, M-03090

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

Mombaerts I, Goldschmeding R, Schlingemann RO and Koornneef L. What is Orbital Pseudotumor? *Surv Ophthalmol* 1996; 41(1):66-78.  
Nugent RA. Inflammatory Pseudotumor of Orbit. *Clin Radiol* 1992; 46(2):148.  
Mombaerts I, Goldschmeding R, Schlingemann RO, et al. Idiopathic Granulomatous Orbital Inflammation. *Ophthalmology* 1996; 103(12):2135-2141.  
Dehner LP and Coffin CM. Idiopathic Fibrosclerotic Disorders and Other Inflammatory Pseudotumors. *Semin Diagn Pathol* 1998; 15(2):161-173.  
Uy HS, Nguyen QD, Arbour J, et al. Sclerosing Inflammatory Pseudotumor of the Eye. *Arch Ophthalmol* 2001; 119(4):603-607.

#### **Case No. 8, Accession No. 27740**

**October 2002**

Bakersfield - Hemangiopericytoma  
Baldwin Park (Kaiser Permanente) - Solitary fibrous tumor (3)  
Bay Area - Solitary fibrous tumor (3)  
Daly City (Seton Medical Center) - Solitary fibrous tumor  
Fontana (Kaiser Permanente) - Solitary fibrous tumor  
Hayward/Fremont - Solitary fibrous tumor  
La Mesa (Grossmont Hospital) - Solitary fibrous tumor  
Long Beach - Solitary fibrous tumor (7)  
Monterey (Community Hospital of Monterey Peninsula) - Solitary fibrous tumor  
Mountain View (El Camino Pathology Group) - Solitary fibrous tumor  
Oakland (Kaiser Permanente) - Solitary fibrous tumor (4)  
Orange (UCI Medical Center Residents) - Solitary fibrous tumor, nasal cavity  
Sacramento (UC Davis Medical Center) - Hemangiopericytoma (5); Solitary fibrous tumor (5)  
San Diego (Naval Medical Center) - Solitary fibrous tumor  
Santa Barbara (Santa Barbara Cottage Hospital) - Solitary fibrous tumor  
Santa Rosa (Santa Rosa Memorial Hospital) - Hemangioendothelioma (2); Hemangiopericytoma-like tumor of nasal passages (1)  
Ventura (Unilab) - Sinonasal hemangiopericytoma (2)  
Alaska (Alaska Native Medical Center) - Kaposi's sarcoma  
Alaska (Anchorage) - Solitary fibrous tumor  
Arizona (Phoenix Memorial Hospital) - Solitary fibrous tumor  
Florida (Munroe Regional Center) - Hemangiopericytoma

Florida (Pathology Associates) - Solitary fibroma  
Florida (Winter Haven Hospital) - Synovial sarcoma  
Indiana (Fort Wayne) - Solitary fibrous tumor, nasal cavity  
Maryland (Johns Hopkins Hospital Residents) - Favor sinonasal hemangiopericytoma vs. solitary fibrous tumor, this distinction may be somewhat artificial (1); Solitary fibrous tumor (1)  
Maryland (National Naval Medical Center) - Solitary fibrous tumor (8); Hemangiopericytoma (4)  
Maryland (NIH Pathology Residents) - Hemangiopericytoma  
Maryland (University of Maryland) - Solitary fibrous tumor  
Massachusetts (Brigham and Women's Residents/Fellows) - Solitary fibrous tumor (2)  
Massachusetts (New England Medical Center Residents) - Hemangiopericytoma  
Michigan (Oakwood Hospital) - Solitary fibrous tumor  
Michigan (St. Joseph Mercy Hospital) - Solitary fibrous tumor  
Nebraska (Creighton University School of Medicine Residents) - Kaposi's sarcoma  
New Jersey (Overlook Hospital) - Solitary fibrous tumor  
New York (Impath) - Solitary fibrous tumor  
New York (Long Island Jewish Medical Center) - Solitary fibrous tumor  
New York (Nassau University Medical Center) - Hemangiopericytoma, nasal cavity  
New York (Stony Brook University Hospital Residents) - Solitary fibrous tumor  
New York (Westchester Medical Center) - Solitary fibrous tumor  
Oklahoma (Tulsa) - Solitary fibrous tumor  
Pennsylvania (Allegheny General Hospital) - Solitary fibrous tumor  
Pennsylvania (Memorial Medical Center) - Solitary fibrous tumor  
Pennsylvania (Shadyside Hospital) - Solitary fibrous tumor  
Puerto Rico (University of Puerto Rico) - Solitary fibrous tumor  
Texas (ProPath Services) - Hemangioendothelioma (1); Kaposi's hemangioendothelioma (1)  
Texas (Scott & White Memorial Hospital) - Solitary fibrous tumor  
West Virginia (Greenbrier Valley Medical Center) - Neurilemmoma  
Wisconsin (Meriter Health Services) - Solitary fibrous tumor  
Australia (North Queensland Pathology) - Solitary fibrous tumor  
Hong Kong (Hong Kong Baptist Hospital) - Angiofibroma  
Ireland (St. James Hospital) - Solitary fibrous tumor  
Qatar (Hamad Medical Corporation) - Hemangioendothelioma, spindle cell variant

#### **Case 8 - Diagnosis:**

Solitary fibrous tumor, nasal cavity  
 T-21340, M-80001

#### **Case 8 – References:**

Goodlad JR and Fletcher CD. Solitary Fibrous Tumors Arising in Unusual Sites. Analysis of a Series. *Histopathol* 1991; 19(6):515-522.  
 Wikin GB and Rosai J. Solitary Fibrous Tumors of the Upper Respiratory Tract. A Report of Six Cases. *Am J. Surg Pathol* 1991; 15(9):842-848.  
 Hanau C and Miettinen M. Solitary Fibrous Tumor. Histological and Immunohistochemical Spectrum of Benign and Malignant Variants Presenting at Different Sites. *Hum Pathol* 1995; 26(4):440-449.  
 Kim TA, Brunberg JA, Pearson P and Ross DA. Solitary Fibrous Tumor of the Paranasal Sinuses. CT and MR Appearance. *AJNR* 1996; 17(9):1762-1772.

#### **Case No. 9, Accession No. 28993**

**October 2002**

Bakersfield - Cylindrical cell carcinoma  
Baldwin Park (Kaiser Permanente) - Inverted squamous papilloma (1); Schneiderian (inverted) papilloma (2)  
Bay Area - Inverted papilloma (3)  
Daly City (Seton Medical Center) - Squamous cell carcinoma in-situ  
Fontana (Kaiser Permanente) - Inverted papilloma

Hayward/Fremont - Inverted sinonasal papilloma  
La Mesa (Grossmont Hospital) - Inverted papilloma  
Long Beach - Inverted papilloma with focal dysplasia (7)  
Monterey (Community Hospital of Monterey Peninsula) - Inverted papilloma  
Mountain View (El Camino Pathology Group) - Papillary squamous cell carcinoma vs. Schneiderian papilloma with dysplasia  
Oakland (Kaiser Permanente) - Inverted Schneiderian squamous papilloma (3) With dysplasia (1)  
Orange (UCI Medical Center Residents) - Inverted papilloma, nasal fossa  
Sacramento (UC Davis Medical Center) - Inverted papilloma with focal areas of suspicious invasion  
San Diego (Naval Medical Center) - Inverted Schneiderian papilloma  
Santa Barbara (Santa Barbara Cottage Hospital) - Inverted nasal papilloma  
Santa Rosa (Santa Rosa Memorial Hospital) - Inverting papilloma (1); Inverting sinonasal papilloma (2)  
Ventura (Unilab) - Inverted Schneiderian papilloma (2)  
Alaska (Alaska Native Medical Center) - Inverted Schneiderian papilloma with dysplasia  
Alaska (Anchorage) - Papillary squamous cell carcinoma  
Arizona (Phoenix Memorial Hospital) - Squamous carcinoma in-situ in squamous papilloma  
Florida (Munroe Regional Center) - Inverted papilloma with malignant transformation  
Florida (Pathology Associates) - Inverted papilloma with moderate dysplasia  
Florida (Winter Haven Hospital) - Squamous cell carcinoma in-situ  
Indiana (Fort Wayne) - Inverted papilloma, nasal fossa  
Maryland (Johns Hopkins Hospital Residents) - Schneiderian papilloma, inverted type with carcinoma in-situ (1); Inverted papilloma (1)  
Maryland (National Naval Medical Center) - Inverted papilloma (8); Transitional carcinoma (2); Carcinoma arising in inverted papilloma (2)  
Maryland (NIH Pathology Residents) - Inverted papilloma  
Maryland (University of Maryland) - Papilloma with squamous cell carcinoma in-situ  
Massachusetts (Brigham and Women's Residents/Fellows) - Inverted Schneiderian papilloma (1); Inverted papilloma with dysplasia (1)  
Massachusetts (New England Medical Center Residents) - Schneiderian papilloma, inverted  
Michigan (Oakwood Hospital) - Inverted papilloma  
Michigan (St. Joseph Mercy Hospital) - Papillary squamous carcinoma  
Nebraska (Creighton University School of Medicine Residents) - Schneiderian papilloma  
New Jersey (Overlook Hospital) - Schneiderian (inverted) papilloma (3) Consistent with squamous cell carcinoma in-situ (1)  
New York (Impath) - Inverted Schneiderian papilloma  
New York (Long Island Jewish Medical Center) - Inverted papilloma  
New York (Nassau University Medical Center) - Carcinoma of the sinonasal tract, nasal fossa  
New York (Stony Brook University Hospital Residents) - Inverted sinonasal papilloma with severe dysplasia  
New York (Westchester Medical Center) - Inverted papilloma consistent with dysplasia and CIS  
Oklahoma (Tulsa) - Inverted Schneiderian papilloma  
Pennsylvania (Allegheny General Hospital) - Papillary carcinoma  
Pennsylvania (Memorial Medical Center) - Papillary carcinoma, nasal fossa  
Pennsylvania (Shadyside Hospital) - Inverted papilloma with focal ulceration  
Puerto Rico (University of Puerto Rico) - Inverted papilloma  
Texas (ProPath Services) - Invasive squamous cell carcinoma (1) Invasive squamous carcinoma with papillomatous pattern (1)  
Texas (Scott & White Memorial Hospital) - Carcinoma arising in a Schneiderian papilloma  
West Virginia (Greenbrier Valley Medical Center) - Schneiderian papilloma  
Wisconsin (Meriter Health Services) - Inverted papilloma with atypia  
Australia (North Queensland Pathology) - Inverted Schneiderian papilloma  
Hong Kong (Hong Kong Baptist Hospital) - Sinonasal papilloma with atypia  
Ireland (St. James Hospital) - Nasal inverted papilloma  
Qatar (Hamad Medical Corporation) - Inverted papilloma

#### **Case 9 - Diagnosis:**

Inverted Schneiderian papilloma, maxillary sinus  
 T-22100, M-81210

#### Case 9 – References:

- Buchwald C, Franzmann MB, Jacobsen GK and Lindeberg H. Human Papillomavirus (HPV) in Sinonasal Papillomas. A Study of 78 Cases Using In-Situ Hybridization and Polymerase Chain Reaction. *Laryngoscope* 1995; 105(1):66-71.
- Michaels L and Young H. Histogenesis of Papillomas of the Nose and Paranasal Sinuses. *Arch Pathol Lab Med* 1995; 119(9):821-826.
- Ridolfi RL, Lieberman PH, Erlandson RA and Moore OS. Schneiderian Papillomas. A Clinicopathologic Study of 30 Cases. *Am J Surg Pathol* 1977; 1(1):43-53.
- Califano J, Koch W, Sidransky D, et al. Inverted Sinonasal Papilloma. A Molecular Genetic Appraisal of its Putative Status as a Precursor to Squamous Cell Carcinoma. *Am J Pathol* 2000; 156(1):333-337.
- Klimek T, Atai E, Schubert M, et al. Inverted Papilloma of the Nasal Cavity and Paranasal Sinuses. Clinical Data, Surgical Strategy and Recurrence Rates. *Acta Otolaryngol* 2000; 120(2):267-272.

#### **Case No. 10, Accession No. 29348**

**October 2002**

Bakersfield - Warthin's tumor

Baldwin Park (Kaiser Permanente) - Warthin's tumor (3)

Bay Area - Cystic oncocytoma with a lymphoid infiltrate (Warthin-like) (2); Oncocytoid variant of Warthin's tumor (1)

Daly City (Seton Medical Center) - Warthin's tumor

Fontana (Kaiser Permanente) - Warthin's tumor

Hayward/Fremont - Warthin's tumor

La Mesa (Grossmont Hospital) - Oncocytoma with lymphoid infiltrate

Long Beach - Warthin's tumor (solid variant) (7)

Monterey (Community Hospital of Monterey Peninsula) - Warthin's tumor

Mountain View (El Camino Pathology Group) - Warthin's tumor

Oakland (Kaiser Permanente) - Warthin's tumor (4)

Orange (UCI Medical Center Residents) - Warthin's tumor

Sacramento (UC Davis Medical Center) - Warthin's tumor (5); Oncocytoma (5)

San Diego (Naval Medical Center) - Warthin's tumor

Santa Barbara (Santa Barbara Cottage Hospital) - Warthin's tumor

Santa Rosa (Santa Rosa Memorial Hospital) - Warthin's tumor (3)

Ventura (Unilab) - Oncocytoma with tumor-associated lymphoid proliferation (2)

Alaska (Alaska Native Medical Center) - Warthin's tumor

Alaska (Anchorage) - Warthin's tumor

Arizona (Phoenix Memorial Hospital) - Warthin's tumor

Florida (Munroe Regional Center) - Warthin's tumor

Florida (Pathology Associates) - Warthin's tumor, oncocytoma

Florida (Winter Haven Hospital) - Oncocytoma

Indiana (Fort Wayne) - Warthin's tumor, parotid

Maryland (Johns Hopkins Hospital Residents) - Warthin's tumor (2)

Maryland (National Naval Medical Center) - Warthin's tumor (9); Oncocytoma (2)

Maryland (NIH Pathology Residents) - Warthin's tumor

Maryland (University of Maryland) - Warthin's tumor

Massachusetts (Brigham and Women's Residents/Fellows) - ? variant of Warthin's tumor (1); Oncocytic adenoma/variant of Warthin's tumor (1)

Massachusetts (New England Medical Center Residents) - Warthin's tumor

Michigan (Oakwood Hospital) - Oncocytoma

Michigan (St. Joseph Mercy Hospital) - Warthin's tumor

Nebraska (Creighton University School of Medicine Residents) - Oncocytoma

New Jersey (Overlook Hospital) - Warthin's tumor

New York (Impath) - Warthin's tumor

New York (Long Island Jewish Medical Center) - Warthin's tumor

New York (Nassau University Medical Center) - Oncocytoma, left parotid gland

New York (Stony Brook University Hospital Residents) - Warthin's tumor  
New York (Westchester Medical Center) - Oncocytoma with lymphoid stroma/Warthin's tumor  
Oklahoma (Tulsa) - Warthin's tumor  
Pennsylvania (Allegheny General Hospital) - Warthin's tumor  
Pennsylvania (Memorial Medical Center) - Warthin's tumor  
Pennsylvania (Shadyside Hospital) - Oncocytoma with reactive lymphoid hyperplasia  
Puerto Rico (University of Puerto Rico) - Warthin's tumor  
Texas (ProPath Services) - Warthin's tumor (2)  
Texas (Scott & White Memorial Hospital) - Oncocytoma  
West Virginia (Greenbrier Valley Medical Center) - Oncocytoma  
Wisconsin (Meriter Health Services) - Oncocytoma involving lymph node vs. Warthin's tumor  
Australia (North Queensland Pathology) - Warthin's tumor, stroma poor type  
Hong Kong (Hong Kong Baptist Hospital) - Warthin's tumor  
Ireland (St. James Hospital) - Warthin's tumor  
Qatar (Hamad Medical Corporation) - Warthin's tumor

**Case 10 - Diagnosis:**

Warthin's tumor, parotid gland  
 T-55100, M-85610

**Case 10 - References:**

Pinkston JA and Cole P. Incidence Rates of Salivary Gland Tumors. Results from a Population-Based Study. *Otolaryngol Head Neck Surg* 1999; 120(6):834-840.  
 Yu GY, Liu XB, Li ZL and Peng X. Smoking and the Development of Warthin's Tumour of the Parotid Gland. *Br J Oral Maxillofac Surg* 1998; 36(3):183-185.  
 Aguirre JM, Echebarria MA, Martinez-Condo R, et al. Warthin Tumor. A New Hypothesis Concerning its Development. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 1998; 85(1):60-63.  
 Gallo O. Is Warthin's Tumor an Epstein Barr Virus Related Disease? *Int J Cancer* 1994; 58(5):756-757.