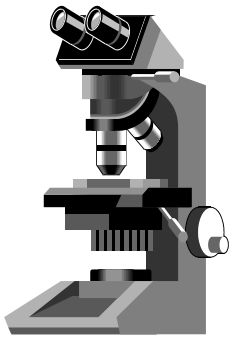
CALIFORNIA
TUMOR TISSUE REGISTRY



LUNG AND MEDIASTINAL PATHOLOGY

Minutes – Subscription A

October 2000

SUGGESTED READING (General Topics from Recent Literature):

Association Between Medications That Relax the Lower Esophageal Sphincter and Risk for Esophageal Adenocarcinoma. Lagergren J, Bergstrom R, Hans-Olov A, and Nyren O. *Annals of Internal Medicine* 2000; 133(3):165-175.

Mandatory Second Opinion Surgical Pathology at a Large Referral Hospital. Kronz JD, Westra WH, and Epstein JI. *Cancer* 1999; 86(11):2198-2220.

Embryonal "Botryoid" Rhadomyosarcoma of the Larynx. A Clinicopathologic and Immunohistochemical Study of Two Cases. Libera DD, Falconieri G and Zanella M. *Annals of Diagnostic Pathology* 1999; 3(6):341-349.

"Virtual Microscopy" and the Internet as Telepathology Consultation Tools. Diagnostic Accuracy in Evaluating Melanocytic Skin Lesions. *The Am J of Dermatopathol* 1999; 21(6):525-531.

California Tumor Tissue Registry
c/o: Department of Pathology and Human Anatomy
Loma Linda University School of Medicine
11021 Campus Avenue, AH 335
Loma Linda, California 92350
(909) 558-4788
FAX: (909) 558-0188
E-mail: cttr@linkline.com
Case of the Month: www.llu.edu/llu/cttr/cotm
Web Page: www.cttr.org

LLUMC Pathology Residents - Solitary fibrous tumor (3 malignant, 2 benign)
Mountain View (El Camino Pathology Group) - Solitary fibrous tumor
Riverside - Mesothelioma
Oakland (Kaiser) - Solitary fibrous tumor (4)
Sebastopol (Pathology Services) - Solitary fibrous tumor of pleura
Monterey (Community Hospital of Monterey Peninsula) - Mesothelioma
Bakersfield - Hemangiopericytoma
Long Beach - Malignant hemangiopericytoma (7)
Santa Clara (Loma Prieta) - Malignant fibrous tumor of pleura (6)
Ventura (Unilab) - Fibrous tumor of pleura (2)
Santa Rosa - Solitary fibrous tumor (2)
Sacramento (UC Davis Health Systems) - Solitary fibrous tumor of pleura
Hayward/Fremont - Epithelioid angiosarcoma (4); Benign fibrous tumor of pleura (1)
Nevada (Reno) - Solitary fibrous tumor
Wisconsin (Meriter) - Malignant solitary fibrous tumor of the pleura with recurrence
Louisiana (Louisiana State University Medical Center) - Hemangiopericytoma
Illinois (Dupage Pathology Associates) - Localized fibrous tumor of the pleura (cellular, likely malignant)
Michigan (Oakwood Hospital) - Malignant solitary fibrous tumor
Indiana (Fort Wayne) - Solitary fibrous tumor, pleura
Kentucky (University of Louisville Residents) - Malignant solitary fibrous tumor
Florida (Monroe Regional Medical Center) - Solitary fibrous tumor
Florida (Winter Haven) - Malignant mesothelioma (1); Malignant fibrous mesothelioma (1); Malignant mesothelioma (sarcomatoid type) (1)
Florida (Tallahassee) - Solitary fibrous tumor (4)
North Carolina (WNC Pathology Group) - Solitary fibrous tumor (3)
Maryland (Woodbine) - Malignant solitary fibrous tumor (2)
Maryland (University of Maryland) - Malignant solitary fibrous tumor
New Jersey (Overlook Hospital) - Fibrous tumor of pleura (recurrent) (3); Fibrous tumor of low malignant potential (1)
Pennsylvania (Conemaugh Medical Center Residents) - Solitary fibrous tumor
Pennsylvania (Lehigh Valley Hospital) - Solitary fibrous tumor of pleura
New York (SUNY Stony Brook University Hospital Residents) - Hemangioendothelioma (10)
New York (Beth Israel Medical Center Residents) - Solitary fibrous tumor
New York (New Hyde Park) - Solitary fibrous tumor
Massachusetts (Berkshire Medical Center) - Solitary fibrous tumor
Massachusetts (New England Medical Center) - Solitary fibrous tumor of pleura
Canada (Foothills Hospital, Calgary) - Solitary fibrous tumor
Japan (Kyoto) - Solitary fibrous tumor (2); Malignant mesothelioma (1)
Japan, Kurashiki (Kawasaki Medical School Hospital) - Solitary fibrous tumor (4)
Singapore - Solitary fibrous tumor
Saudi Arabia (King Khalid University Hospital) - Malignant solitary fibrous tumor of the pleura (4); Kaposi's sarcoma (1)

DIAGNOSIS:

Malignant solitary fibrous tumor, pleura
T-29000, M-90510

CONSULTATION: (AFIP) "Malignant solitary fibrous tumor."

REFERENCES:

Hanau CA 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.

Hasegawat, Hirose T, Seki K, et al. Solitary Fibrous Tumor of the Soft Tissue. An Immunohistochemical and Ultrastructural Study. *Am J Clin Pathol* 1996; 106(3):325-331.

Weynand B, Collard P and Galant C. Cytopathological Features of Solitary Fibrous Tumor of the Pleura. A Study of 5 Cases. *Diagn Cytopathol* 1998; 18(2):118-124.

Apple SK, Nieberg RK and Hirschowitz SL. Fine Needle Aspiration Biopsy of Solitary Fibrous Tumor of the Pleura. A Report of Two Cases with a Discussion of Diagnostic Pitfalls. *Acta Cytol* 1997; 41(5):1528-1533.

LLUMC Pathology Residents - Malignant mesothelioma (biphasic)
Mountain View (El Camino Pathology Group) - Mesothelioma, epithelial and desmoplastic type
Riverside - Mesothelioma
Oakland (Kaiser) - Mesothelioma, epithelioid (4)
Sebastopol (Pathology Services) - Malignant mesothelioma
Monterey (Community Hospital of Monterey Peninsula - Mesothelioma
Bakersfield - Mesothelioma, biphasic
Long Beach - Malignant mesothelioma (7)
Santa Clara (Loma Prieta) - Malignant mesothelioma (6)
Ventura (Unilab) - Biphasic malignant mesothelioma (2)
Santa Rosa - Malignant mesothelioma (confirm with IPOX) (1); Malignant mesothelioma vs. adenocarcinoma, need IPOX
Sacramento (UC Davis Health Systems) - Favor mesothelioma, cannot exclude adenocarcinoma
Hayward/Fremont - Malignant mesothelioma (5)
Nevada (Reno) - Mesothelioma, biphasic
Wisconsin (Meriter) - Diffuse malignant mesothelioma, biphasic type involving parietal and visceral pleura with invasion of the lung
Louisiana (Louisiana State University Medical Center) - Mesothelioma, malignant
Illinois (Dupage Pathology Associates) - Diffuse malignant mesothelioma (pleura)
Michigan (Oakwood Hospital) - Mesothelioma
Indiana (Fort Wayne) - Diffuse malignant mesothelioma, pleura with mixed sarcomatoid, desmoplastic, epithelioid and tubulo patterns
Kentucky (University of Louisville Residents) - Malignant mesothelioma
Florida (Monroe Regional Medical Center) - Diffuse malignant mesothelioma epithelial type
Florida (Winter Haven) - Malignant epithelioid mesothelioma (3)
Florida (Tallahassee) - Malignant mesothelioma, spindled and epithelioid type
North Carolina (WNC Pathology Group) - Malignant mesothelioma, biphasic (3)
Maryland (Woodbine) - Malignant mesothelioma (2)
Maryland (University of Maryland) - Malignant mesothelioma, mixed
New Jersey (Overlook Hospital) - Malignant mesothelioma with focal pseudosarcomatous features (4)
Pennsylvania (Lehigh Valley Hospital) - Malignant mesothelioma
Pennsylvania (Conemaugh Medical Center Residents) - Malignant mesothelioma
New York (SUNY Stony Brook University Hospital Residents) - Mesothelioma (10)
New York (Beth Israel Medical Center Residents) - Malignant mesothelioma
New York (New Hyde Park) - Malignant mesothelioma
Massachusetts (Berkshire Medical Center) - Malignant mesothelioma
Massachusetts (New England Medical Center) - Mesothelioma
Canada (Foothills Hospital, Calgary) - Mesothelioma
Japan (Kyoto) - Malignant mesothelioma (3)
Japan, Kurashiki (Kawasaki Medical School Hospital) - Malignant mesothelioma (4)
Singapore - Mesothelioma
Saudi Arabia (King Khalid University Hospital) - Mesothelioma

DIAGNOSIS:

Malignant mesothelioma, pleura
T-29000**,** M-90503

REFERENCES:
Walts AE, Said JW and Koeffler HP. Is Immunoreactivity for p53 Useful in Distinguishing Benign from Malignant Effusions? Localization of p53 Gene Product in Benign Mesothelial and Adenocarcinoma Cells. *Mod Pathol* 1994; 7(4):462-468.
Anand A. Prognostic Factors of Malignant Mesothelioma of the Pleura. *Cancer* 1994; 73(3):755.
Cristaudo A, Vivaldi A, Sensales G, et al. Molecular Biology Studies on Mesothelioma Tumor Samples. Preliminary Data on H-ras, p21 and SV40. *J Environ Pathol Toxicol Oncol* 1995; 14(1):29-34.

LLUMC Pathology Residents - Mature teratoma
Mountain View (El Camino Pathology Group) - Mature cystic teratoma
Riverside - Teratoma, mature
Oakland (Kaiser) - Mature teratoma (4)
Sebastopol (Pathology Services) - Hamartoma
Monterey (Community Hospital of Monterey Peninsula) - Teratoma
Bakersfield - Mature teratoma
Long Beach - Mature teratoma (7)
Santa Clara (Loma Prieta) - Extralobular sequestration (6)
Ventura (Unilab) - Cystic teratoma (2)
Santa Rosa - Teratoma (mature) (2)
Sacramento (UC Davis Health Systems) - Favor immature teratoma
Hayward/Fremont - Mature teratoma (5)
Nevada (Reno) - Mature teratoma
Wisconsin (Meriter) - Mature teratoma
Louisiana (Louisiana State University Medical Center) - Mature teratoma
Illinois (Dupage Pathology Associates) - Mature teratoma, grade 0 (mediastinum)
Michigan (Oakwood Hospital) - Hamartoma
Indiana (Fort Wayne) - Extralobular pulmonary sequestration, (L) thorax – mediastinal zone
Kentucky (University of Louisville Residents) - Bronchogenic cyst
Florida (Monroe Regional Medical Center) - Benign teratoma
Florida (Winter Haven) - Benign (mature) teratoma (3)
Florida (Tallahassee) - Teratoma (4)
North Carolina (WNC Pathology Group) - Mature teratoma (3)
Maryland (Woodbine) - Mature teratoma (1); Hamartoma (1)
Maryland (University of Maryland) - Mature teratoma
New Jersey (Overlook Hospital) - Mature teratoma (4)
Pennsylvania (Lehigh Valley Hospital) - Bronchopulmonary sequestration (1); Bronchogenic cyst (10
Pennsylvania (Conemaugh Medical Center) - Teratoma, mature
New York (SUNY Stony Brook University Hospital Residents) - Teratoma, mature (10)
New York (Beth Israel Medical Center Residents) - Hamartoma
New York (New Hyde Park) - Mature teratoma
Massachusetts (Berkshire Medical Center) - Congenital cystic adenomatoid malformation vs. mature cystic teratoma
Massachusetts (New England Medical Center) - Teratoma
Canada (Foothills Hospital, Calgary) - Mature cystic teratoma
Japan (Kyoto) - Mature cystic teratoma (3)
Japan, Kurashiki (Kawasaki Medical School Hospital) - Teratoma, mature (4)
Singapore - Mature cystic teratoma
Saudi Arabia (King Khalid University Hospital) - Mature cystic teratoma

DIAGNOSIS:

Mature cystic teratoma, mediastinum
T-Y2300, M-90800

REFERENCES:

Robinson LA, Rikkers LF and Dobson JR. Benign Mediastinal Teratoma Masquerading as a Large Multiloculated Effusion. *Ann Thoac Surg* 1994; 58(2):545-548.
Dehner LP. Germ Cell Tumors of the Mediastinum. *Semin Diagn Pathol* 1990; 7(4):266-284.
Weidner N. Germ-Cell tumors of the Mediastinum. *Semin Diagn Pathol* 1999; 16(1):42-50.
Verhaeghe W, Meysman M, Noppen M, et al. Benign Cystic Teratoma. An Uncommon Cause of Anterior Mediastinal Mass. *Acta Clin Belg (Belgium)* 1995; 50(2):126-129.

LLUMC Pathology Residents - Benign thymoma (3); Lymphocyte predominant vs. mixed (2)
Mountain View (El Camino Pathology Group) - Thymoma
Riverside - Thymoma
Oakland (Kaiser) - Thymoma, lymphocyte predominant (4)
Sabastopol (Pathology Services) - Favor thymoma, lymphocyte rich - (need immunostains)
Monterey (Community Hospital of Monterey Peninsula) - Thymoma, lymphocyte predominant
Bakersfield - Lymphocyte predominant thymoma
Long Beach - Thymoma (7)
Santa Clara (Loma Prieta) - Hodgkin's disease (6)
Ventura (Unilab) - Lymphocyte predominant thymoma (2)
Santa Rosa - Thymoma vs lymphoma, (confirm with IPOX) (2)
Sacramento (UC Davis Health Systems) - Lymphocyte predominant thymoma
Hayward/Fremont - Lymphocyte predominant thymoma (3); Malignant lymphoma, small lymphocytic, type (2)
Nevada (Reno) - Thymoma, lymphocyte predominant
Wisconsin (Meriter) - Thymoma, lymphocyte predominant with adjacent ? of involuted thymus gland
Louisiana (Louisiana State University Medical Center) - Thymoma, mixed lymphoepithelial
Illinois (Dupage Pathology Associates) - Likely malignant lymphoma, rule out low-grade MALT-associated type (thymus)
Michigan (Oakwood Hospital) - Thymoma, lymphocyte predominant
Indiana (Fort Wayne) - Thymic Hodgkin's (so-called "granulomatous thymoma" of Lattes?)
Kentucky (University of Louisville Residents) - Thymoma
Florida (Monroe Regional Medical Center) - Thymoma
Florida (Winter Haven) - Lymphocytic predominant thymoma (3)
Florida (Tallahassee) - Lymphocytic thymoma
North Carolina (WNC Pathology Group) - Thymoma (3)
Maryland (Woodbine) - Lymphocyte predominant thymoma (2)
Maryland (University of Maryland) - Lymphocytic thymoma
New Jersey (Overlook Hospital) - Thymoma (2); Lymphocytic thymoma (2)
Pennsylvania (Lehigh Valley Hospital) - Thymoma (1); Lymphoblastic lymphoma (1)
Pennsylvania (Conemaugh Medical Center Residents) - Thymoma
New York (SUNY Stony Brook University Hospital Residents) - Thymoma, lymphocyte predominant (American classification) vs lymphoma (prolymphocytic ?) (10)
New York (Beth Israel Medical Center Residents) - Thymoma
New York (New Hyde Park) - Thymoma, cortical type
Massachusetts (Berkshire Medical Center) - Thymoma vs. B-cell thymic lymphoma
Massachusetts (New England Medical Center) - Thymoma, predominantly lymphocytic
Canada (Foothills Hospital, Calgary) - Thymoma, encapsulated
Japan (Kyoto) - Thymoma, lymphocytic predominant (3)
Japan, Kurashiki (Kawasaki Medical School Hospital) - Thymoma (4)
Singapore - Burkitt's lymphoma
Saudi Arabia (King Khalid University Hospital) - Thymoma

DIAGNOSIS:

Thymoma, lymphocyte predominant
T-98000, M-53850

REFERENCES:
Walker AN, Mills SE and Fechner RE. Thymomas and Thymic Carcinomas. *Semin Diagn Pathol* 1990; 7(4):250-265.
Koga K, Matsuno Y, Noguchi M, et al. A Review of 79 Thymomas. Modification of Staging System and Reappraisal of Conventional Division into Invasive and Non-Invasive Thymoma. *Pathol Int* 1995; 45(1):87-89.
Cooper JD. Current Therapy for Thymoma. *Chest* 1993; 103(4 Suppl):334S-336S.
Suster S and Rosai J. Cystic Thymomas. A Clinicopathologic Study of Ten Cases. *Cancer* 1992; 69(1):92-97.

LLUMC Pathology Residents - Large cell neuroendocrine carcinoma
Mountain View (El Camino Pathology Group) - Atypical carcinoid
Riverside - Carcinoid
Oakland (Kaiser) - Well-differentiated neuroendocrine carcinoma (4)
Sebastopol (Pathology Services) - Atypical carcinoid tumor
Monterey (Community Hospital of Monterey Peninsula) - Neuroendocrine carcinoma
Bakersfield - Atypical carcinoid tumor
Long Beach - Neuroendocrine carcinoma (intermediate grade) (7)
Santa Clara (Loma Prieta) - Atypical carcinoid tumor (6)
Ventura (Unilab) - Atypical carcinoid (2)
Santa Rosa - Neuroendocrine carcinoma (2)
Sacramento (UC Davis Health Systems) - Atypical carcinoid/neuroendocrine carcinoma
Hayward/Fremont - Large cell neuroendocrine carcinoma (5)
Nevada (Reno) - Large cell neuroendocrine carcinoma
Wisconsin (Meriter) - Neuroendocrine carcinoma, grade 2 (atypical carcinoid)
Louisiana (Louisiana State University Medical Center) - Neuroendocrine carcinoma
Illinois (Dupage Pathology Associates) - Atypical carcinoid tumor (lung)
Michigan (Oakwood Hospital) - Carcinoma, large cell neuroendocrine type
Indiana (Fort Wayne) - Large cell neuroendocrine carcinoma, lung (right upper lobe)
Kentucky (University of Louisville Residents) - Large cell carcinoma with neuroendocrine features
Florida (Monroe Regional Medical Center) - Anaplastic carcinoid tumor
Florida (Winter Haven) - Malignant carcinoid (neuroendocrine carcinoma) (2); Atypical carcinoid (1)
Florida (Tallahassee) - Neuroendocrine carcinoma (4)
North Carolina (WNC Pathology Group) - Atypical carcinoid (3)
Maryland (Woodbine) - Atypical carcinoid (2)
Maryland (University of Maryland) - Neuroendocrine carcinoma, grade III
New Jersey (Overlook Hospital) - Large cell neuroendocrine carcinoma (4)
Pennsylvania (Lehigh Valley Hospital) - Atypical carcinoid
Pennsylvania (Conemaugh Medical Center Residents) - Atypical carcinoid vs. large cell neuroendocrine carcinoma
New York (SUNY Stony Brook University Hospital Residents) - Carcinoid tumor, typical, insular pattern (10)
New York (Beth Israel Medical Center Residents) - Carcinoid tumor
New York (New Hyde Park) - Atypical carcinoid
Massachusetts (Berkshire Medical Center) - Atypical carcinoid tumor
Massachusetts (New England Medical Center) - Large cell carcinoma with neuroendocrine differentiation (1); Atypical carcinoid (2)
Canada (Foothills Hospital, Calgary) - Large cell neuroendocrine carcinoma
Japan (Kyoto) - Atypical carcinoid (1); Large cell neuroendocrine carcinoma (2)
Japan, Kurashiki (Kawasaki Medical School Hospital) - Neuroendocrine carcinoma, well-differentiated (2); Atypical carcinoma (1); Small cell carcinoma (1)
Singapore - Large cell neuroendocrine carcinoma
Saudi Arabia (King Khalid University Hospital) - Atypical carcinoid

DIAGNOSIS:

Large cell neuroendocrine carcinoma, lung
T-28000, M-80103

REFERENCES:

Hammond ME and Sause WT. Large Cell Neuroendocrine Tumors of the Lung. Clinical Significance and Histopathologic Definition. *Cancer* 1985; 56(7):1624-1629.

Travis WD, Linnoila RI, Tsokos MG, et al. Neuroendocrine Tumors of the Lung with Proposed Criteria for Large-Cell Neuroendocrine Carcinoma. An Ultrastructural, Immunohistochemical and Flow Cytometric Study of 35 Cases. *Am J Surg Pathol* 1991; 15(6):529-553.

Kasai K, Kameya T, Kawakubo Y, et al. Pulmonary Large Cell Carcinoma Expressing Neuroendocrine Markers. The Morphological, Biological, and Neuroendocrine Features of their Cell Lines and Surgical Cases. *Jpn J Cancer Res* 1992; 83(9):1002-1010.

Wick MR, Berg LC and Hertz MI. Large Cell Carcinoma of the Lung with Neuroendocrine Differentiation. A Comparison with Large Cell "Undifferentiated" Pulmonary Tumors. *Am J Clin Pathol* 1992; 97(6):796-805.

LLUMC Pathology Residents - Poorly differentiated squamous cell carcinoma
Mountain View (El Camino Pathology Group) - Squamous cell carcinoma, basaloid type
Riverside - Mixed squamous and bronch-alveolar carcinoma
Oakland (Kaiser) - Squamous cell carcinoma (3); Squamous cell carcinoma (3); Basaloid squamous cell carcinoma (1)
Sebastopol (Pathology Services) - Squamous cell carcinoma
Monterey (Community Hospital of Monterey Peninsula) - Squamous cell carcinoma
Bakersfield - Squamous cell carcinoma
Long Beach - Squamous cell carcinoma (7)
Santa Clara (Loma Prieta) - Squamous carcinoma (6)
Ventura (Unilab) - Well-differentiated squamous cell carcinoma (2)
Santa Rosa - Squamous cell carcinoma (2)
Sacramento (UC Davis Health Systems) - Basaloid squamous cell carcinoma
Hayward/Fremont - Squamous carcinoma (5)
Nevada (Reno) - Squamous cell carcinoma
Wisconsin (Meriter) - Basaloid squamous cell carcinoma
Louisiana (Louisiana State University Medical Center) - Squamous cell carcinoma with basaloid differentiation
Illinois (Dupage Pathology Associates) - Basaloid squamous carcinoma (lung)
Michigan (Oakwood Hospital) - Well-differentiated squamous cell carcinoma
Indiana (Fort Wayne) - Basaloid squamous cell carcinoma, rule out lung
Kentucky (University of Louisville Residents) - Adenosquamous carcinoma
Florida (Monroe Regional Medical Center) - Squamous cell carcinoma
Florida (Winter Haven) - Adenosquamous carcinoma (3)
Florida (Tallahassee) - Squamous cell carcinoma with basaloid features
North Carolina (WNC Pathology Group) - Basaloid squamous cell carcinoma (3)
Maryland (Woodbine) - Adenosquamous carcinoma (2)
Maryland (University of Maryland) - Basaloid squamous cell carcinoma
New Jersey (Overlook Hospital) - Squamous carcinoma, poorly-differentiated (3); Adenosquamous (1)
Pennsylvania (Lehigh Valley Hospital) - Squamous cell carcinoma
Pennsylvania (Conemaugh Medical Center Residents) - Basaloid squamous cell carcinoma
New York (SUNY Stony Brook University Hospital) - Adenosquamous carcinoma with "basaloid features"
New York (Beth Israel Medical Center Residents) - Basiloid squamous cell carcinoma
New York (New Hyde Park) - Well-differentiated squamous carcinoma
Massachusetts (Berkshire Medical Center) - Basaloid squamous cell carcinoma
Massachusetts (New England Medical Center) - Squamous cell carcinoma with basaloid features
Canada (Foothills Hospital) - Mucoepidermoid carcinoma
Japan (Kyoto) - Squamous cell carcinoma (2)
Japan, Kurashiki (Kawasaki Medical School Hospital) - Squamous cell carcinoma (4)
Singapore - Squamous cell carcinoma with acantholytic and clear cell features
Saudi Arabia (King Khalid University Hospital) - Basosquamous carcinoma

DIAGNOSIS:

Squamous cell carcinoma, lung
T-28000, M-80703

REFERENCES:

Bejui-Thivolet F, Liagre N, Chignol MC, et al. Deletion of Human Papilloma Virus DNA in Squamous Bronchial Metaplasia and Squamous Cell Carcinomas of the Lung by In-Situ Hybridigzation Using Biotinylaled Probes in Paraffin-Embedded Specimens. *Hum Pathol* 1990; 21:111-116.

Bennett WP, Colby TV, Travis WD, et al. p53 Protein Accumulates Frequently in Early Bronchial Neoplasia. *Cancer Res* 1993; 53(20):4817-4822.

Carter D. Squamous Cell Carcinoma of the Lung. An Update. *Semin Diagn Pathol* 1985; 2(4):226-234.

Khuder SA, Dayal HH, Mutgi AB, et al. Effect of Cigarette Smoking on Major Histological Types of Lung Cancer in Men. *Lung Cancer* (Ireland) 1998; 22(1):15-21.

LLUMC Pathology Residents - Poorly differentiated squamous cell carcinoma
Mountain View (El Camino Pathology Group) - Adenosquamous carcinoma
Riverside - Poorly differentiated adenocarcinoma with signet ring cell features
Oakland (Kaiser) - Mucoepidermoid carcinoma (3); Adenosquamous carcinoma (1)
Sebastopol (Pathology Services) - Poorly differentiated carcinoma, non small cell
Monterey (Community Hospital of Monterey Peninsula) - Mucoepidermoid carcinoma
Bakersfield - Poorly differentiated adenocarcinoma
Long Beach - Mucoepidermoid carcinoma (high grade) (7)
Santa Clara (Loma Prieta) - Mucoepidermoid carcinoma (6)
Ventura (Unilab) - Squamous carcinoma with mucin production (2)
Santa Rosa - Bronchogenic carcinoma, mixed pattern (1); Undifferentiated carcinoma, possibly mixed (1)
Sacramento (UC Davis Health Systems) - Poorly differentiated squamous cell carcinoma
Hayward/Fremont - Large cell non-keratinizing carcinoma (poorly differentiated adenocarcinoma) (2); Adenocarcinoma with signet ring cells (2); Mucoepidermoid (1)
Nevada (Reno) - Adenosquamous carcinoma
Wisconsin (Meriter) - Adenosquamous cell carcinoma with vascular invasion involving lung 1° vs. 2°
Louisiana (Louisiana State University Medical Center) - Squamous cell carcinoma
Illinois (Dupage Pathology Associates) - Mucoepidermoid carcinoma, high grade vs. ? lung
Michigan (Oakwood Hospital) - Adenocarcinoma, solid with mucus foundation
Indiana (Fort Wayne) - Grade 2, mucoepidermoid carcinoma, right lung
Kentucky (University of Louisville Residents) - Large cell carcinoma, giant cell type
Florida (Monroe Regional Medical Center) - Adenocarcinoma
Florida (Winter Haven) - Adenosquamous carcinoma (3)
Florida (Tallahassee) - Bronchoalveolar carcinoma
North Carolina (WNC Pathology Group) - Mucoepidermoid carcinoma (2); High grade mucoepidermoid carcinoma
Maryland (Woodbine) - Mucoepidermoid carcinoma (1); Adenosquamous carcinoma (1)
Maryland (University of Maryland) - Non-small cell carcinoma with giant cells
New Jersey (Overlook Hospital) - Adenosquamous carcinoma (2); Mucoepidermoid carcinoma (2)
Pennsylvania (Lehigh Valley Hospital) - Non small cell carcinoma (1); Adenosquamous carcinoma (1)
Pennsylvania (Conemaugh Medical Center Residents) - Acinar (tubular) adenocarcinoma of bronchial gland
New York (SUNY Stony Brook University Hospital Residents) - Metastatic mucoepidermoid carcinoma vs. adenosquamous carcinoma
New York (Beth Israel Medical Center Residents) - Malignant mesothelioma
New York (New Hyde Park) - Undifferentiated non-small carcinoma favor mucoepidermoid carcinoma (adenosquamous carcinoma)
Massachusetts (Berkshire Medical Center) - Mucoepidermoid carcinoma
Massachusetts (New England Medical Center) - Adenosquamous carcinoma (1); Poorly differentiated adenocarcinoma (2)
Canada (Foothills Hospital) - Glassy cell carcinoma, ferruginous bodies present
Japan (Kyoto) - Mucoepidermoid carcinoma (1); Large cell carcinoma (1); Carcinosarcoma (1)
Japan, Kurashiki (Kawasaki Medical School Hospital) - Adenosquamous carcinoma (4)
Singapore - Non small cell carcinoma, suggestive of poorly differentiated adenocarcinoma
Saudi Arabia (King Khalid University Hospital) - Adenocarcinoma (primary from other sites like stomach should be excluded)

DIAGNOSIS:

Adenosquamous carcinoma, lung
T-28000, M-80703

REFERENCES:

Takamori S, Noguchi M and Morinaga S. Clinicopathologic Characteristics of Adenosquamous Carcinoma of the Lung. *Cancer* 1991; 67(3):649-654.
Yousem SA. Pulmonary Adenosquamous Carcinomas with Amyloid-Like Stroma. *Mod Pathol* 1989; 2(5):420-426.
Naunheim KS, Taylor JR, Skosey C, et al. Adenosquamous Lung Carcinoma. Clinical Characteristics, Treatment and Prognosis. *Ann Thorac Surg* 1987; 44(5):462-466.
Flury-Herard A, Viegas-Peguignot E, Cremoux H, et al. Cytogenic Study of Five Cases of Lung Adenosquamous Carcinoma. *Cancer Genet Cytogenet* 1992; 59(1):1-8.

LLUMC Pathology Residents - Malignant fibrous histiocytoma
Mountain View (El Camino Pathology Group) - Osteosarcoma
Riverside - Sarcoma, high grade
Oakland (Kaiser) - Pleomorphic leiomyosarcoma (4)
Sebastopol - Sarcoma (favor rhabdomyosarcoma)
Monterey (Community Hospital of Monterey Peninsula) - Sarcoma, rhabdomyosarcoma
Bakersfield - High grade sarcoma, rule out muscle origin
Long Beach - High grade sarcoma (myogenic) (7)
Santa Clara (Loma Prieta) - Sarcoma, NOS (6)
Ventura (Unilab) - Pleomorphic rhabdomyosarcoma (2)
Santa Rosa - Malignant mesenchymal neoplasm, possibly myosarcoma (1); Sarcoma, possibly rhabdomyosarcoma (1)
Sacramento (UC Davis Health Systems) - Poorly differentiated sarcoma favor leiomyosarcoma
Hayward/Fremont - Desmoplastic myosarcoma (2); Pleomorphic fibrosarcoma (1); Pleomorphic malignant fibrous histiocytoma (1)
Nevada (Reno) - Leiomyosarcoma vs. high grade sarcoma
Wisconsin (Meriter) - Pleomorphic malignant spindle and giant cell tumor involving diaphragm, probably high grade sarcoma
Louisiana (Louisiana State University Medical Center) - Malignant fibrous histiocytoma vs. malignant mesenchymal tumor
Illinois (Dupage Pathology Associates) - Pleomorphic sarcoma, ? leiomyosarcoma (of diaphragm)
Michigan (Oakwood Hospital) - High grade sarcoma
Indiana (Fort Wayne) - Epithelioid mesothelioma, right pleura (do calcitonin, etc)
Kentucky (University of Louisville Residents) - Pleomorphic sarcoma
Florida (Monroe Regional Medical Center) - Leiomyosarcoma
Florida (Winter Haven) - Sarcoma (MFH) (2); Malignant fibrous mesothelioma (1)
Florida (Tallahassee) - Myosarcoma, rhabdomyosarcoma
North Carolina (WNC Pathology Group) - Sarcoma ? MFH? Osteo (2); Sarcoma, high grade (1)
Maryland (Woodbine) - Leiomyosarcoma (1); Undifferentiated sarcoma (1)
Maryland (University of Maryland) - Poorly differentiated sarcoma consistent with leiomyosarcoma
New Jersey (Overlook Hospital) - Sarcoma, NOS (1); Sarcoma, ? MFH (3)
Pennsylvania (Lehigh Valley Hospital) - Rhabdomyosarcoma (1); Pleomorphic malignant fibrous histiocytoma (1)
Pennsylvania (Conemaugh Medical Center Residents) - High grade sarcoma (MFH?)
New York (SUNY Stony Brook University Hospital Residents) - Rhabdomyosarcoma, pleomorphic (10)
New York (Beth Israel Medical Center Residents) - Malignant fibrous histiocytoma
New York (New Hyde Park) - High grade pleomorphic sarcoma favor MFH, recommend CD34 staining to exclude malignant solitary fibrous tumor
Massachusetts (Berkshire Medical Center) - Pleomorphic sarcoma vs. sarcomatoid carcinoma
Massachusetts (New England Medical Center) - Poorly differentiated sarcoma (1); Leiomyosarcoma (2); Angiosarcoma (3)
Canada (Foothills Hospital, Calgary) - Pleomorphic sarcoma, favor MFH
Japan (Kyoto) - Undifferentiated carcinoma (1); Epithelioid leiomyosarcoma (1); Malignant fibrous histiocytoma (1)
Japan, Kurashiki (Kawasaki Medical School Hospital) - Pleomorphic carcinoma (3); Malignant fibrous histiocytoma (1)
Singapore - High grade malignant tumor suggestive of malignant fibrous histiocytoma
Saudi Arabia (King Khalid University Hospital) - Pleomorphic leiomyosarcoma

DIAGNOSIS:

Pleomorphic high grade sarcoma (MFH phenotype) with focal osseous differentiation, lung
T-28000, M-88023

REFERENCES:

McDonnell T, Kyriakos M, Roper C and Mazoujian G. Malignant Fibrous Histiocytoma of the Lung. *Cancer* 1988; 61(1):137-145.
Yousem SA and Hochholzer L. Malignant Fibrous Histiocytoma of the Lung. *Cancer* 1987; 60:2532-2541.
Viguera JL, Pujol JL, Reboiras SD, et al. Fibrous Histiocytoma of the Lung. *Thorax* 1976; 31(4):475-479.
Sajjad SM, Begin LR, Dail DH and Lukeman JM. Fibrous Histiocytoma of Lung. A Clinicopathologic Study of Two Cases. *Histiopathology* 1981; 5(3):325-334.

LLUMC Pathology Residents - Malignant spindle cell tumor (monophasic synovial sarcoma vs. rare CK+ MPNST, or leiomyosarcoma)
Mountain View (El Camino Pathology Group) - Sarcomatoid carcinoma
Riverside - Carcinosarcoma
Oakland (Kaiser) - Sarcomatoid carcinoma (4)
Sebastopol (Pathology Services) - Spindle cell carcinoma
Monterey (Community Hospital of Monterey Peninsula) - Sarcoma
Bakersfield - Sarcomatoid carcinoma
Long Beach - Pseudosarcomatous carcinoma (7)
Santa Clara (Loma Prieta) - Carcinoma with spindle and giant cell foci (6)
Ventura (Unilab) - Spindle cell squamous cell carcinoma (2)
Santa Rosa - Spindle cell carcinoma (2)
Sacramento (UC Davis Health Systems) - Spindle carcinoma (sarcomatoid carcinoma)
Hayward/Fremont - Dedifferentiated (metaplastic) large cell carcinoma (3); Pleomorphic carcinoma (2)
Nevada (Reno) - Sarcomatoid carcinoma
Wisconsin (Meriter) - Pleomorphic malignant spindle and giant cell tumor involving lung, consistent with spindle cell (sarcomatoid) carcinoma, rule out mets from ss
Louisiana (Louisiana State University Medical Center) - Carcinoma with sarcomatoid features
Illinois (Dupage Pathology Associates) - High grade sarcomatoid carcinoma, lung
Michigan (Oakwood Hospital) - Carcinoma, sarcomatoid/spindle cell variant
Indiana (Fort Wayne) - Sarcomatoid carcinoma, left lower lobe lung
Kentucky (University of Louisville Residents) - Sarcomatoid carcinoma
Florida (Monroe Regional Medical Center) - Carcinosarcoma
Florida (Winter Haven) - Carcinosarcoma (3)
Florida (Tallahassee) - Sarcomatoid carcinoma (4)
North Carolina (WNC Pathology Group) - Sarcomatoid carcinoma (2); Carcinosarcoma (1)
Maryland (Woodbine) - Synovial sarcoma (2)
Maryland (University of Maryland) - Sarcomatoid carcinoma
New Jersey (Overlook Hospital) - Sarcoma/? Pseudosarcomatous carcinoma (1); Pleomorphic carcinoma (3)
Pennsylvania (Lehigh Valley Hospital) - Carcinoma with spindle cell features (1); Spindle cell squamous cell carcinoma (1)
Pennsylvania (Conemaugh Medical Center Residents) - Undifferentiated large cell carcinoma (giant cell type)
New York (SUNY Stony Brook University Hospital) - Leiomyosarcoma (10)
New York (Beth Israel Medical Center Residents) - Synovial sarcoma
New York (New Hyde Park) - Sarcoma favor leiomyosarcoma, would perform SMA and caldesmin stains to confirm the diagnosis
Massachusetts (Berkshire Medical Center) - Sarcomatoid carcinoma
Massachusetts (New England Medical Center) - Spindle cell carcinoma (1); Carcinosarcoma (2); Mesothelioma (3)
Canada (Foothills Hospital, Calgary) - Synovial sarcoma
Japan (Kyoto) - Spindle cell carcinoma (3)
Japan, Kurashiki (Kawasaki Medical School Hospital) - Sarcomatoid carcinoma (4)
Singapore - Sarcomatoid carcinoma
Saudi Arabia (King Khalid University Hospital) - Sarcomatoid carcinoma/spindle cell carcinoma

DIAGNOSIS:

Sarcomatoid carcinoma (spindle cell carcinoma), lung
T-28000, M-80323

REFERENCES:

Nappi O, Glasner SD, Swanson PE and Wick MR. Biphasic and Monophasic Sarcomatoid Carcinomas of the Lung. A Reappraisal of "Carcinosarcoma" and "Spindle-Cell Carcinomas." *Am J Clin Pathol* 1994; 102(3):331-340.

Wick MR, Ritter JH and Nappi O. Inflammatory Sarcomatoid Carcinoma of the Lung. Report of Three Cases and Clinicopathologic Comparison with Inflammatory Pseudotumors in Adult Patients. *Hum Pathol* 1995; 26(9):1014-1021.

Nakajima M, Kasai T, Hasimoto H, et al. Sarcomatoid Carcinoma of the Lung. A Clinicopathologic Study of 37 Cases. *Cancer* 1999; 86(4):608-616.

Wick MR, Ritter JH and Humphrey PA. Sarcomatoid Carcinomas of the Lung. A Clinicopathologic Review. *Am J Clin Pathol* 1997; 108(1):40-53.

LLUMC Pathology Residents - Papillary adenocarcinoma, favor metastatic
Mountain View (El Camino Pathology Group) - Bronchioalveolar carcinoma
Riverside - Bronchoalveolar carcinoma
Oakland (Kaiser) - Bronchioloalveolar carcinoma (4)
Sebastopol (Pathology Services) - Bronchioalveolar type adenocarcinoma
Monterey (Community Hospital of Monterey Peninsula) - Bronchoalveolar cell carcinoma
Bakersfield - Bronchioloalveolar carcinoma
Long Beach - Adenocarcinoma (bronchoalveolar type) (7)
Santa Clara (Loma Prieta) - Adenocarcinoma with bronchioalveolar features (6)
Ventura (Unilab) - Bronchioalveolar carcinoma (2)
Santa Rosa - Bronchioalveolar (1); Alveolar carcinoma (1)
Sacramento (UC Davis Health Systems) - Broncho-alveolar carcinoma
Hayward/Fremont - Adenocarcinoma with papillary features (5)
Nevada (Reno) - Bronchoalveolar carcinoma
Wisconsin (Meriter) - Bronchioloalveolar cell carcinoma in absence of a 1° tumor elsewhere
Louisiana (Louisiana State University Medical Center) - Broncho-alveolar carcinoma
Illinois (Dupage Pathology Associates) - Mucinous bronchioloalveolar carcinoma
Michigan (Oakwood Hospital) - Adenocarcinoma, papillary type
Indiana (Fort Wayne) - Mucinous bronchiolo-alveolar carcinoma, lower lobe, left lung
Kentucky (University of Louisville Residents) - Bronchoalveolar carcinoma
Florida (Monroe Regional Medical Center) - Bronchioalveolar adenocarcinoma
Florida (Winter Haven) - Bronchoalveolar carcinoma (3)
Florida (Tallahassee) - Mucinous broncho-alveolar carcinoma
North Carolina (WNC Pathology Group) - Bronchioloalveolar carcinoma (3)
Maryland (Woodbine) - Bronchioloalveolar carcinoma (1); Adenocarcinoma (1)
Maryland (University of Maryland) - Bronchioloalveolar carcinoma
New Jersey (Overlook Hospital) - Bronchioloalveolar cell carcinoma (4)
Pennsylvania (Lehigh Valley Hospital) - Bronchoalveolar carcinoma
Pennsylvania (Conemaugh Medical Center Residents) - Bronchoalveolar carcinoma
New York (SUNY Stony Brook University Hospital Residents) - Bronchioalveolar carcinoma
New York (Beth Israel Medical Center Residents) - Metastatic adenocarcinoma
New York (New Hyde Park) - Bronchioalveolar carcinoma, metastatic carcinoma to be excluded
Massachusetts (Berkshire Medical Center) - Bronchioloalveolar carcinoma, non-mucinous type
Massachusetts (New England Medical Center) - Bronchioalveolar carcinoma (1); Metastatic adenocarcinoma (2)
Canada (Foothills Hospital, Calgary) - Bronchoalveolar carcinoma
Japan (Kyoto) - Bronchio-alveolar carcinoma (3)
Japan, Kurashiki (Kawasaki Medical School Hospital) - Adenocarcinoma (4)
Singapore - Bronchioloalveolar carcinoma
Saudi Arabia (King Khalid University Hospital) - Bronchioloalveolar carcinoma (3); Adenocarcinoma (3)

DIAGNOSIS:

Bronchoalveolar carcinoma, lung
T-28000, M-82503

REFERENCES:

Ohorin NP, Yousem SA, Griffin J, et al. Comparison of Extra-Cellular Matrix Antigens in Subtypes of Bronchoalveolar Carcinoma and Conventional Pulmonary Adenocarcinoma. An Immunohistochemical Study. *Am J Surg Pathol* 1992; 16(7):675-686.

Tao LC, Weisbrod GL, Pearson FG, et al. Cytologic Diagnosis of Bronchoalveolar Carcinoma by Fine Needle Aspiration Biopsy. *Cancer* 1986; 57(8):1565-1570.

Axiotes CA and Jennings TA. Observations on Broncho-Alveolar Carcinomas with Special Emphasis on Localized Lesion. A Clinicopathological, Ultrastructural and Immunochemical Study of 11 Cases. *Am J Surg Pathol* 1988; 129(12):918-931.

Daly RC, Trastck VF and Pairolero PC. Bronchoalveolar Carcinoma. Factors Affecting Survival. *Ann Thorac Surg* 1991; 51(3):368-377.