



CALIFORNIA
TUMOR TISSUE REGISTRY

PATHOLOGY OF LUNG AND MEDIASTINUM

Minutes – Subscription A

March 2013



SUGGESTED READING (General Topics from Recent Literature):

- Tallonb, Snow J. Low Clinically significant rate of recurrence in benign nevi. *Am J Dermatopathol* 2012; 34 (October): 706-709.
- Pichler M, Hutterer GC, et al. Presence and Extent of histological tumour necrosis is an adverse prognostic factor in papillary type 1 but not in papillary type 2 renal cell carcinoma. *Histopathology* 2013; 62 (January): 219-228.
- Lasota J, Wang Z, et al. Expression of the receptor for type 1 insulin-like growth factor (IGFIR) in gastrointestinal stromal tumors: An immunohistochemical study of 1078 cases with diagnostic and therapeutic implications. *Am J Surg Pathol* 2013; (January): 114-119
- Boyd C, McCluggage WG, Low-grade ovarian serous neoplasms (Low-grade serous carcinoma and serous borderline tumor) associated with high-grade serous carcinoma or undifferentiated carcinoma: Report of a series of cases of an unusual phenomenon. *Am J Surg Pathol* 2011;36 (March): 368-375.
- Salaria SN, Streppel MM, et al. Sessile serrated adenoma: High risk lesions? *Hum Pathol* 2012; 43 (November): 1808-1814.

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FILE DIAGNOSES

CTTR Subscription A

March 2013

Case 1:

Thymoma, predominantly type AB

Case 2:

Thymic carcinoid tumor (low grade neuroendocrine carcinoma), thymus

Case 3:

Mature teratoma, mediastinum

Case 4:

Spindle cell tumor most consistent with malignant peripheral nerve tumor (MPNST), mediastinum

Case 5:

Mucinous (colloid) carcinoma involving thymus: Rule out metastasis before accepting as thymic primary

Case 6:

Neuroendocrine neoplasm, prefer paraganglioma over carcinoid tumor, lung

Case 7:

Malignant mesothelioma, pleura

Case 8:

Lipid pneumonia (mineral oil or lipoid pneumonia), lung

Case 9:

Invasive adenocarcinoma, lepidic predominant but also with bronchoalveolar pattern, lung

Case 10:

Choriocarcinoma, lung, rule out metastasis

Fontana (Kaiser Foundation Hospital) - Thymoma
Glendale - Invasive, epithelial-rich thymoma
Lakewood – Malignant epithelial thymoma
Long Beach (Long Beach VA) - Thymoma B type (well differentiated carcinoma)
Livermore (St. Rose Hospital) - Thymoma, predominantly epithelial (A)
Oakland (Alameda County Medical Center) - Thymoma
Orinda (Kaiser Permanente) - Thymoma Type A
Oxnard (St. John's Regional Medical Center) - Thymoma B3 / Thymoma epithelial type
Santa Barbara (Miramonte Lab) - Sarcoidosis
Woodland Hills (Kaiser Permanente) - Thymoma
Arkansas (Associated Pathologists Laboratory) -Noncaseating granulomatous lymphadenitis / Thymoma
Delaware (Armed Forces Medical Examiner System) - Thymoma
Florida (GastroEnterology Associates of Ocala) - Thymoma-spindle cell
Georgia, Atlanta - Thymoma B3 subtype
Georgia Atlanta (Emory University Hospital) – Thymoma type A vs. Thymic carcinoma
Illinois (Heartland Regional Medical Center) - Thymoma Type B3
Illinois, Oakbrook – Thymoma epithelial spindle
Kansas, Manhattan (Peterson Laboratory) – Thymoma B3
Massachusetts, Worcester (University of Massachusetts) – Thymoma type B3
Minnesota (Fairview Ridges Hospital) - Thymoma, A ?invasive
New York (Erie County Medical Center) - Thymoma, spindle cell type
New York (SUNY Downstate Medical Center) - Thymoma
New York (Buffalo General Hospital) - Spindle cell thymoma (type A)
Pennsylvania (Conemaugh Memorial Medical Center) - Thymoma Type AB
Pennsylvania (Lehigh Valley Hospital) - Atypical Thymoma
Pennsylvania (Magee Women's Hospital) - Spindle cell thymoma
Puerto Rico, San Juan (University of Puerto Rico) – B3 type thymoma/well differentiated thymic carcinoma
South Carolina (Medical University of South Carolina) - Thymoma A type
Tennessee, Maryville - Thymoma, well-differentiated
Texas, Crystal Beach - Non caseating granuloma (sarcoid?)
Texas, Lubbock - Thymoma
Washington (Seattle VAMC) - Thymoma
West Virginia (Greenbrier Valley Medical Center) - Spindle cell malignant thymoma
Wisconsin, Madison - Thymic carcinoma
Wisconsin, Cross Plains (Medical Assessment and Consultations) - Spindle cell thymoma with small lymphocytic component
Australia (Royal Hobart Hospital) - Thymoma (type AB)
Australia (Royal Prince Alfred Hospital) – Thymoma (favor micronodular with lymphoid hyperplasia, with some areas type B3)
Brazil (Rua Vicente Beghilli) - B3 Thymoma
Canada (Universite de Sherbrook) – Thymoma AB
Canada (Pasqua Hospital) – Spindle cell thymoma
Ireland (Bon Secours Tralee) - Thymoma
Ireland (Kerry General Hospital) - Lymphoepithelioma-like thymic carcinoma
Ireland (University College Hospital) - Type A thymoma
Japan (Asashi General Hospital) - Thymoma type B3 / Thymoma type AB
Japan (Setagaya-Ku) - Thymic carcinoma
Japan (Wakayama Medical University) - Thymoma type B2
Oman (Sultanate of Azaiba) - Thymoma
Saudi Arabia (King Fahad Hospital) - Thymoma B3
Saudi Arabia (King Khalid University Hospital) - Thymoma (AB) type
United Kingdom (John Radcliffe Hospital) - Thymoma (WHO type AB)

Case 1 - Diagnosis:

Thymoma, predominantly type AB

Case 1 - References:

World Health Organization classification of thymomas provides significant prognostic information for selected stage III patients: evidence from an international thymoma study group.

Hum Pathol 2010 Oct;41(10): p1413-21

Marchevsky AM; Gupta R, et al.

The multidisciplinary approach to thymoma: combining molecular and clinical approaches.

J Thorac Oncol 2010 Oct;5(10 Suppl 4): pS313-7

Chau NG; Kim ES; Wistuba I

Thymoma and thymic carcinoma: molecular pathology and targeted therapy.

J Thorac Oncol 2010 Oct;5(10 Suppl 4): pS286-90

Strobel P; Hohenberger P; Marx A

Surgical treatment of early stage thymoma.

Lung Cancer 2010 Oct;70(1): p116; author reply 117

Anile M; Diso D, et al.

Invasive spindle cell thymomas (WHO Type A): a clinicopathologic correlation of 41 cases.

Am J Clin Pathol 2010 Nov;134(5): p793-8

Moran CA; Kalhor N; Suster S

Case No. 2, Accession No. 30142**March 2013**

Fontana (Kaiser Foundation Hospital) - Neuroendocrine tumor

Glendale - Thymic carcinoid

Lakewood – Neuroendocrine tumor

Long Beach (Long Beach VA) - Neuroendocrine tumor (low grade (well differentiated)

Livermore (St. Rose Hospital) - Carcinoid

Oakland (Alameda County Medical Center) – Carcinoid tumor

Orinda (Kaiser Permanente) - Thymic neuroendocrine tumor

Oxnard (St. John's Regional Medical Center) - Parathyroid adenoma

Santa Barbara (Miramonte Lab) - Carcinoid

Woodland Hills (Kaiser Permanente) – Well differentiated neuroendocrine tumor (Carcinoid tumor)

Arkansas (Associated Pathologists Laboratory) - Well differentiated neuroendocrine carcinoma (carcinoid)

Delaware (Armed Forces Medical Examiner System) - Well differentiated neuroendocrine carcinoma

Florida (GastroEnterology Associates of Ocala) - Neuroendocrine tumor

Georgia, Atlanta - Thymic carcinoid

Georgia Atlanta (Emory University Hospital) – Neuroendocrine tumor

Illinois (Heartland Regional Medical Center) - Carcinoid (Neuroendocrine tumor, grade 1)

Illinois, Oakbrook – Thymic NE carcinoma

Kansas, Manhattan (Peterson Laboratory) – Low grade neuroendocrine carcinoma Thymic carcinoid

Massachusetts, Worcester (University of Massachusetts) – Atypical carcinoid

Minnesota (Fairview Ridges Hospital) - Well-differentiated neuroendocrine carcinoma (carcinoid tumor)

New York (Erie County Medical Center) - Grade 1 neuroendocrine carcinoma (carcinoid)

New York (SUNY Downstate Medical Center) - Atypical carcinoid

New York (Buffalo General Hospital) - Low grade neuroendocrine tumor

Pennsylvania (Conemaugh Memorial Medical Center) - 1) Neuroendocrine tumor, well differentiated; 2) Parathyroid carcinoma

Pennsylvania (Lehigh Valley Hospital) - Carcinoid

Pennsylvania (Magee Women's Hospital) - Carcinoid

Puerto Rico, San Juan (University of Puerto Rico) – Well differentiated neuroendocrine carcinoma (typical carcinoid)

South Carolina (Medical University of South Carolina) - Atypical thymic carcinoid

Tennessee, Maryville - Carcinoid tumor
Texas, Crystal Beach - Plasmacytoma
Texas, Lubbock – Neuroendocrine carcinoma
Washington (Seattle VAMC) - Carcinoma' probable endocrine all type
West Virginia (Greenbrier Valley Medical Center) - Thymic carcinoid tumor
Wisconsin, Madison - Carcinoid tumor
Wisconsin, Cross Plains (Medical Assessment and Consultations) - Well differentiated thymic neuroendocrine neoplasm (low grade carcinoma) oncocyctic variant
Australia (Royal Hobart Hospital) - Thymic Carcinoid
Australia (Royal Prince Alfred Hospital) – Atypical carcinoid tumor
Brazil (Rua Vicente Beghilli) - Neuroendocrine tumor grade 1
Canada (Universite de Sherbrook) – Neuroendocrine carcinoma, metastatic
Canada (Pasqua Hospital) - Carcinoid
Ireland (Bon Secours Tralee) - Carcinoid tumor
Ireland (Kerry General Hospital) - Central carcinoid tumor
Ireland (University College Hospital) - Carcinoid
Japan (Asashi General Hospital) - Well-differentiated neuroendocrine carcinoma/ Thymoma type B
Japan (Setagaya-Ku) - Paraganglioma
Japan (Wakayama Medical University) - Atypical carcinoid tumor
Oman (Sultanate of Azaiba) - Atypical carcinoid
Saudi Arabia (King Fahad Hospital) - Atypical carcinoid tumor
Saudi Arabia (King Khalid University Hospital) - Carcinoid tumor (well differentiated neuroendocrine neoplasm)
United Kingdom (John Radcliffe Hospital) - Thymic carcinoid tumor (well differentiated)

Case 2 - Diagnosis:

Thymic carcinoid tumor (low grade neuroendocrine carcinoma), thymus

Case 2 - References:

Carcinoid tumor of the thymus associated with Cushing's syndrome and dysgeusia: case report and review of the literature.

Endocrine 2010 Feb;37(1): p1-5

Claret C; Chillaron JJ, et al.

Atypical carcinoid of thymus associated with multiple endocrine neoplasia syndrome type 1.

Gen Thorac Cardiovasc Surg 2010 Oct;58(10): p534-7

Otake Y; Aoki M, et al.

Thymic neuroendocrine tumour (carcinoid): clinicopathological features of four patients with different presentation.

Interact Cardiovasc Thorac Surg 2010 Dec;11(6): p732-6

Dutta R; Kumar A, et al.

Primary neuroendocrine tumours of the thymus: a clinicopathologic and prognostic study in 19 patients.

Eur J Cardiothorac Surg 2010 Apr;37(4): p814-8

Cardillo G; Treggiari S, et al.

Carcinoid tumor of the thymus: a clinicopathologic report of two cases with a review of the literature.

Int Surg 2005 Nov-Dec;90(5): p270-4

Luh SP; Kuo C, et al.

Thymic carcinoid with mucinous stroma: a rare variant of carcinoid with an aggressive clinical course.

Ann Diagn Pathol 2006 Apr;10(2): p114-6

Gao Z; Kahn L; Bhuiya T

Indolent course of thymic carcinoid.

J Clin Oncol 2007 Mar 20;25(9): p1138-9

Rabinowits G; Shuster TD, et al.

Fontana (Kaiser Foundation Hospital) - Teratoma
Glendale - Mature Teratoma
Lakewood – Malignant teratoma
Long Beach (Long Beach VA) - Teratoma mature
Livermore (St. Rose Hospital) - Teratoma
Oakland (Alameda County Medical Center) – Cystic teratoma
Orinda (Kaiser Permanente) - Teratoma
Oxnard (St. John’s Regional Medical Center) - Bronchogenic cyst / Teratoma
Santa Barbara (Miramonte Lab) - Teratoma
Woodland Hills (Kaiser Permanente) – Mature teratoma
Arkansas (Associated Pathologists Laboratory) - Immature teratoma
Delaware (Armed Forces Medical Examiner System) - Mature cystic teratoma
Florida (GastroEnterology Associates of Ocala) - Teratoma cystic
Georgia, Atlanta - Teratoma
Georgia Atlanta (Emory University Hospital) – Solitary fibrous tumor
Illinois (Heartland Regional Medical Center) - Mature teratoma
Illinois, Oakbrook – Mature teratoma, angiosarcoma
Kansas, Manhattan (Peterson Laboratory) – Mature cystic teratoma / Teratoma
Massachusetts, Worcester (University of Massachusetts) – Mature teratoma
Minnesota (Fairview Ridges Hospital) - Teratoma, ?malignant vascular component
New York (Erie County Medical Center) - Cystic teratoma of mediastinum (carcinoid)
New York (SUNY Downstate Medical Center) - Mature teratoma
New York (Buffalo General Hospital) - Mature mediastinal teratoma
Pennsylvania (Conemaugh Memorial Medical Center) - Mature cystic teratoma
Pennsylvania (Lehigh Valley Hospital) - Mature teratoma
Pennsylvania (Magee Women’s Hospital) - Teratoma
Puerto Rico, San Juan (University of Puerto Rico) – Mature teratoma
South Carolina (Medical University of South Carolina) - Mature teratoma
Tennessee, Maryville - Mature teratoma
Texas, Crystal Beach - Neurofibroma
Texas, Lubbock - Teratoma
Washington (Seattle VAMC) - Hamartoma / Teratoma
West Virginia (Greenbrier Valley Medical Center) - Fibromatosis (Desmoid type)
Wisconsin, Madison - Teratoma
Wisconsin, Cross Plains (Medical Assessment and Consultations) - Benign bronchogenic cyst
Australia (Royal Hobart Hospital) - Mature teratoma mediastinum
Australia (Royal Prince Alfred Hospital) - Teratoma
Brazil (Rua Vicente Beghilli) - Mature teratoma
Canada (Universite de Sherbrook) – Teratoma
Canada (Pasqua Hospital) - Teratoma
Ireland (Bon Secours Tralee) - Mature cystic teratoma
Ireland (Kerry General Hospital) - Immature teratoma
Ireland (University College Hospital) - Mediastinal mature teratoma
Japan (Asahi General Hospital) - Mature teratoma / Teratoma
Japan (Setagaya-Ku) - Teratoma
Japan (Wakayama Medical University) - Mature teratoma
Oman (Sultanate of Azaiba) - Mature teratoma
Saudi Arabia (King Fahad Hospital) - Mature teratoma
Saudi Arabia (King Khalid University Hospital) - Mediastinal teratoma
United Kingdom (John Radcliffe Hospital) - Teratoma, no malignant components

Case 3 - Diagnosis:

Mature teratoma, mediastinum

Director’s note: This tumor had two types of teratoma. Most was mature (and was in most, if not all of the study sets). There was also an immature component with a small portion of seminoma/

germinoma. I do not believe that any of the study set slides had the seminoma component. (drc)

Case 3 - References:

Mediastinitis after EUS-guided FNA biopsy of a posterior mediastinal metastatic teratoma.
Gastrointest Endosc 2005 Dec;62(6): p980-1
Pai KR; Page RD

Anterior mediastinal nonseminomatous germ cell tumor with malignant transformation: a case report.
Curr Surg 2004 Nov-Dec;61(6): p576-9
Michel M; Pratt JW

Cystic tumors in the anterior mediastinum. Radiologic-pathological correlation.
J Comput Assist Tomogr 2003 Sep-Oct;27(5): p714-23
Kim JH; Goo JM, et al.

Immature teratoma of the mediastinum arising in ectopic thyroid tissue: a case report.
Anal Quant Cytol Histol 2009 Aug;31(4): p233-8
Ranaldi R; Morichetti D, et al.

Typical carcinoid arising in mature teratoma of anterior mediastinum.
Asian Cardiovasc Thorac Ann 2012 Feb;20(1): p80-2
Gupta P; Singh S, et al.

Huge mature cystic teratoma of the posterior mediastinum.
Am J Med Sci 2009 Nov;338(5): p413
Wang HB; Lin CW, et al.

Case No. 4, Accession No. 30463

March 2013

Fontana (Kaiser Foundation Hospital) - Schwannoma
Glendale - Myofibroblastic tumor
Lakewood – Degenerating ancient Schwannoma
Long Beach (Long Beach VA) - Peripheral nerve sheath tumor
Livermore (St. Rose Hospital) - Myxofibrosarcoma, low grade
Oakland (Alameda County Medical Center) - Schwannoma
Orinda (Kaiser Permanente) - Fibromatosis versus ganglioneuroma
Oxnard (St. John's Regional Medical Center) - MPNST / Malignant peripheral nerve sheath tumor
Santa Barbara (Miramonte Lab) - Dendritic cell sarcoma
Woodland Hills (Kaiser Permanente) - Fibromatosis
Arkansas (Associated Pathologists Laboratory) - Interdigitating dendritic cell tumor/sarcoma
Delaware (Armed Forces Medical Examiner System) - PEComa
Florida (GastroEnterology Associates of Ocala) - Myxoid neurofibroma
Georgia, Atlanta - Fibrosing mediastinitis
Georgia Atlanta (Emory University Hospital) – Idiopathic interstitial fibrosis
Illinois (Heartland Regional Medical Center) - Sclerosing mesenchymal neoplasm, nos, low grade
Illinois, Oakbrook – Fibroma
Kansas, Manhattan (Peterson Laboratory) – Interdigitating dendritic cell tumor
Massachusetts, Worcester (University of Massachusetts) – Malignant peripheral sheath tumor
Minnesota (Fairview Ridges Hospital) - Malignant peripheral sheath tumor
New York (Erie County Medical Center) - Inflammatory myofibroblastic tumor
New York (SUNY Downstate Medical Center) - Sclerosing mediastinitis
New York (Buffalo General Hospital) - Sclerosing mediastinitis
Pennsylvania (Conemaugh Memorial Medical Center) - Malignant peripheral nerve sheath tumor
Pennsylvania (Lehigh Valley Hospital) - Malignant peripheral nerve sheath tumor
Pennsylvania (Magee Women's Hospital) - Ganglioneuroma
Puerto Rico, San Juan (University of Puerto Rico) – Dendritic cell carcinoma, follicular vs. interdigitating
South Carolina (Medical University of South Carolina) - Sclerosing epithelioid fibrosarcoma

Tennessee, Maryville - Intrathoracic desmoids tumor
Texas, Crystal Beach - Sarcoma dendritic cell (?)
Texas, Lubbock - Leiomyosarcoma
Washington (Seattle VAMC) - Low grade stromal neoplasm
West Virginia (Greenbrier Valley Medical Center) - Mediastinal fibrosis
Wisconsin, Madison - Extraskelatal mesenchymal chondrosarcoma
Wisconsin, Cross Plains (Medical Assessment and Consultations) - Solitary fibrous tumor
Australia (Royal Hobart Hospital) - Spindle cell sarcoma-possible MPNST
Australia (Royal Prince Alfred Hospital) – Sarcoma (differentials: malignant fibrous histiocytoma, malignant peripheral nerve sheath tumor)
Brazil (Rua Vicente Beghilli) - Solitary fibrous tumor
Canada (Universite de Sherbrook) – Ancient schwannoma
Canada (Pasqua Hospital) – Malignant peripheral nerve sheath tumor
Ireland (Bon Secours Tralee) - Fibrosarcoma
Ireland (Kerry General Hospital) - Malignant peripheral nerve sheath tumor
Ireland (University College Hospital) - Desmoid tumor
Japan (Asashi General Hospital) - Malignant peripheral nerve sheath tumor / Desmoid tumor
Japan (Setagaya-Ku) - Solitary fibrous tumor
Japan (Wakayama Medical University) - Low-grade myofibroblastic sarcoma
Oman (Sultanate of Azaiba) - Sarcoma DD. 1- Malignant peripheral nerve sheath tumor, 2- Malignant fibrous histiocytoma
Saudi Arabia (King Fahad Hospital) - malignant peripheral nerve sheath tumor
Saudi Arabia (King Khalid University Hospital) - Sclerosing epithelioid fibrosarcoma
United Kingdom (John Radcliffe Hospital) - malignant fibrous histiocytoma (MFH) of the pleura

Case 4 - Diagnosis:

Spindle cell tumor most consistent with malignant peripheral nerve tumor (MPNST), mediastinum

Consultation, Mayo Clinic, Rochester: “High grade spindle cell sarcoma, most c/w MPNST”

Director’s note: Tumor cells are focally packed together (without significant cytoplasm), and there is tumor necrosis, both of which are rarely seen in fibromatosis. The tumor was also focally S100 positive, again, unusual for fibromatosis and others in the differential. (drc)

Case 4 - References:

Malignant peripheral nerve sheath tumors.
 Neurosurg Focus 2007;22(6): pE12
 Gupta G; Maniker A

Long-term survival after removal of a malignant peripheral nerve sheath tumor originating in the anterior mediastinum.
 Gen Thorac Cardiovasc Surg 2009 Jun;57(6): p310-4
 Shimoyama T; Yoshiya K, et al.

A case of intrathoracic giant malignant peripheral nerve sheath tumor in neurofibromatosis type I (von Recklinghausen's disease).
 Ann Thorac Cardiovasc Surg 2008 Feb;14(1): p42-7
 Shimizu J; Arano Y, et al.

Intrathoracic malignant peripheral nerve sheath tumor in neurofibromatosis 1.
 J Clin Oncol 2008 May 1;26(13): p2216-8
 Chao BH; Stogner-Underwood KA, et al.

Primary malignant peripheral nerve sheath tumor of the lung in a young child without neurofibromatosis type 1.
 Pediatr Blood Cancer 2006 Oct 15;47(5): p636-8
 Muwakkit SA; Rodriguez-Galindo C, et al.

Malignant peripheral nerve sheath tumour of the cervical vagus nerve in a neurofibromatosis type 1 patient.
J Plast Reconstr Aesthet Surg 2006;59(12): p1458-62
Molina AR; Brasch H; Tan ST

Malignant peripheral nerve sheath tumor with divergent differentiation.
Arch Pathol Lab Med 2003 Mar;127(3): pe147-50
Huang L; Espinoza C; Welsh R

Malignant peripheral nerve sheath tumor in a hamster.
J Am Assoc Lab Anim Sci 2007 Nov;46(6): p55-7
Snyder LA; Linder KE; Neel JA

Case No. 5, Accession No. 31508

March 2013

Fontana (Kaiser Foundation Hospital) - Mucinous adenocarcinoma, GI primary
Glendale - Mucinous carcinoma, rule out ovarian origin
Lakewood – Mucinous carcinoma
Long Beach (Long Beach VA) - Mucinous adenocarcinoma (colloid carcinoma)
Livermore (St. Rose Hospital) - Mucinous carcinoma, colonic type
Oakland (Alameda County Medical Center) – Mucinous adenocarcinoma
Orinda (Kaiser Permanente) - Mucinous carcinoma
Oxnard (St. John's Regional Medical Center) - Colloid carcinoma
Santa Barbara (Miramonte Lab) - Mucinous adenocarcinoma
Woodland Hills (Kaiser Permanente) - Mucinous carcinoma
Arkansas (Associated Pathologists Laboratory) - Mucinous adenocarcinoma / Signet ring adenocarcinoma
Delaware (Armed Forces Medical Examiner System) - Mucinous adenocarcinoma, favor thymic primary
Florida (Gastroenterology Associates of Ocala) - Adenocarcinoma-Mucinous
Georgia, Atlanta - Colloid/mucinous carcinoma
Georgia Atlanta (Emory University Hospital) - Mucinous (colloid) carcinoma
Illinois (Heartland Regional Medical Center) - Mucinous adenocarcinoma
Illinois, Oakbrook – Colloid Adenocarcinoma
Kansas, Manhattan (Peterson Laboratory) - Mucinous adenocarcinoma / Mucinous (colloid) carcinoma
Massachusetts, Worcester (University of Massachusetts) – Mucinous adenocarcinoma
Minnesota (Fairview Ridges Hospital) - Mucinous adenocarcinoma
New York (Erie County Medical Center) - Mucinous (colloid) thymic carcinoma
New York (SUNY Downstate Medical Center) - Mucinous carcinoma
New York (Buffalo General Hospital) - Primary mucinous adenocarcinoma of thymus
Pennsylvania (Conemaugh Memorial Medical Center) - Mucinous carcinoma
Pennsylvania (Lehigh Valley Hospital) - Mucinous neuroendocrine neoplasm of thymus
Pennsylvania (Magee Women's Hospital) - Mucinous adenocarcinoma
Puerto Rico, San Juan (University of Puerto Rico) – Mucinous carcinoma, signet ring cell type, primary versus metastatic
South Carolina (Medical University of South Carolina) - Mucinous adenocarcinoma, most probably colon primary
Tennessee, Maryville - Metastatic mucinous adenocarcinoma
Texas, Crystal Beach - Adenocarcinoma mucinous
Texas, Lubbock - Mucinous carcinoma
Washington (Seattle VAMC) - Low grade mucus-secreting adenocarcinoma
West Virginia (Greenbrier Valley Medical Center) - Colloid adenocarcinoma
Wisconsin, Madison - Mucinous (colloid) carcinoma
Wisconsin, Cross Plains (Medical Assessment and Consultations) - Signet ring/ Goblet cell carcinoma; do IHC to evaluate for goblet cell “carcinoid”
Australia (Royal Hobart Hospital) - Mucinous adenocarcinoma-metastasis to be excluded
Australia (Royal Prince Alfred Hospital) - Mucinous adenocarcinoma
Brazil (Rua Vicente Beghilli) - Mucinous carcinoma
Canada (Universite de Sherbrook) – Mucinous carcinoma, metastatic

Canada (Pasqua Hospital) - Adenocarcinoma
Ireland (Bon Secours Tralee) - Mucinous adenocarcinoma (thymic carcinoma)
Ireland (Kerry General Hospital) - Mucinous adenocarcinoma
Ireland (University College Hospital) - Mucinous adenocarcinoma/Colloid carcinoma
Japan (Asashi General Hospital) - Mucinous adenocarcinoma / Metastatic mucinous adenocarcinoma, possibly ovarian origin
Japan (Setagaya-Ku) - Mucinous carcinoma
Japan (Wakayama Medical University) - Primary mucinous adenocarcinoma of the thymus
Oman (Sultanate of Azaiba) - Mucinous (colloid) adenocarcinoma
Saudi Arabia (King Fahad Hospital) - Metastatic mucinous carcinoma
Saudi Arabia (King Khalid University Hospital) - Mucin adenocarcinoma most probably metastatic
United Kingdom (John Radcliffe Hospital) - Primary thymic mucinous adenocarcinoma

Case 5 - Diagnosis:

Mucinous (colloid) carcinoma involving thymus: Rule out metastasis before accepting as thymic primary

Case 5 - References:

Mucinous adenocarcinoma of the thymus: a distinct variant of thymic carcinoma.
 Lung Cancer 2009 Apr;64(1): p22-7
 Maeda D; Ota S, et al.

Adenocarcinoma of the thymus: report of two cases, including a previously undescribed mucinous subtype.
 Am J Surg Pathol 2003 Jan;27(1): p124-30
 Choi WW; Lui YH, Chan JK, et al.

Mucinous adenocarcinomas of the thymus: report of 2 cases and review of the literature.
 Am J Surg Pathol 2007 Sep;31(9): p1330-6
 Ra SH; Fishbein MC, et al.

Case No. 6, Accession No. 12365

March 2013

Fontana (Kaiser Foundation Hospital) - Carcinoid tumor
Glendale - Paraganglioma
Lakewood - Hemangiopericytoma
Long Beach (Long Beach VA) - Sclerosing hemangioma, hemangiocytooma
Livermore (St. Rose Hospital) - Paraganglioma
Oakland (Alameda County Medical Center) – Spindle cell carcinoid
Orinda (Kaiser Permanente) - Carcinoid tumor
Oxnard (St. John’s Regional Medical Center) - Carcinoid / Carcinoid vs. low grade neuroendocrine tumor
Santa Barbara (Miramonte Lab) - Carcinoid
Woodland Hills (Kaiser Permanente) – PEComa (clear cell tumor)
Arkansas (Associated Pathologists Laboratory) - Carcinoid
Delaware (Armed Forces Medical Examiner System) - Paraganglioma
Florida (GastroEnterology Associates of Ocala) - Atypical PNET (carcinoid)
Georgia, Atlanta - Carcinoid tumor
Georgia Atlanta (Emory University Hospital) – Carcinoid tumor vs. paraganglioma
Illinois (Heartland Regional Medical Center) - Carcinoid (neuroendocrine tumor, grade1)
Illinois, Oakbrook – NE Carcinoma
Kansas, Manhattan (Peterson Laboratory) - Paraganglioma
Massachusetts, Worcester (University of Massachusetts) – Paraganglioma vs PEComa
Minnesota (Fairview Ridges Hospital) - Paraganglioma
New York (Erie County Medical Center) - Gangliocytic paraganglioma (?thyroid-like area? Teratoma)
New York (SUNY Downstate Medical Center) - Carcinoid
New York (Buffalo General Hospital) - PEComa of lung (sugar tumor)

Pennsylvania (Conemaugh Memorial Medical Center) - 1) Paraganglioma; 2) Well differentiated neuroendocrine carcinoma
Pennsylvania (Lehigh Valley Hospital) - Carcinoid
Pennsylvania (Magee Women's Hospital) - Melanotic Paraganglioma
Puerto Rico, San Juan (University of Puerto Rico) – Paraganglioma r/o atypical carcinoid
South Carolina (Medical University of South Carolina) - Carcinoid
Tennessee, Maryville - N/A
Texas, Crystal Beach - Soft tissue tumor vs mesothelial
Texas, Lubbock - Paraganglioma
Washington (Seattle VAMC) - Low grade endocrine neoplasia
West Virginia (Greenbrier Valley Medical Center) - Carcinoid tumor
Wisconsin, Madison - Spindle cell carcinoid tumor
Wisconsin, Cross Plains (Medical Assessment and Consultations) - Neuroendocrine carcinoma (would do IHC)
Australia (Royal Hobart Hospital) - Paraganglioma
Australia (Royal Prince Alfred Hospital) – Neuroendocrine tumor (differentials: carcinoid and paraganglioma)
Brazil (Rua Vicente Beghilli) - Fusocellular neuroendocrine tumor (grade I)
Canada (Universite de Sherbrook) – Atypical carcinoid, lung
Canada (Pasqua Hospital) - Paraganglioma
Ireland (Bon Secours Tralee) - Carcinoid tumor
Ireland (Kerry General Hospital) - Sclerosing haemangioma
Ireland (University College Hospital) - Pulmonary carcinoid
Japan (Asahi General Hospital) - Chemodectoma / Epithelioid hemangioendothelioma
Japan (Setagaya-Ku) - Atypical carcinoid
Japan (Wakayama Medical University) - Carcinoid tumor
Oman (Sultanate of Azaiba) - Carcinoid
Saudi Arabia (King Fahad Hospital) - Differential of carcinoid tumor vs. paraganglioma
Saudi Arabia (King Khalid University Hospital) - Atypical carcinoid (moderately differentiated neuroendocrine neoplasm)
United Kingdom (John Radcliffe Hospital) - Paraganglioma

Case 6 - Diagnosis:

Neuroendocrine neoplasm, prefer paraganglioma over carcinoid tumor, lung

Director's comment: Note the profound nesting ("zellballen") growth pattern that may also occur in the more common carcinoid tumors, but usually not to this degree. (drc)

Case 6 - References:

Primary paraganglioma of the lung.
 Ann Diagn Pathol 2004 Aug;8(4): p237-41
 Aubertine CL; Flieder DB

Primary pulmonary paraganglioma: report of a functioning case with immunohistochemical and ultrastructural study.
 Am J Surg Pathol 2004 Jun;28(6): p825-9
 Shibahara J; Goto A, et al.

Primary pulmonary paraganglioma: case report and literature review.
 Clinics (Sao Paulo) 2006 Feb;61(1): p83-6
 da Silva RA; Gross JL, et al.

Corticotropin-producing pulmonary gangliocytic paraganglioma associated with Cushing's syndrome.
 Hum Pathol 2006 May;37(5): p623-6
 Palau MA; Merino MJ; Quezado M

Primary paraganglioma of the lung: a case report and literature review.
 J Int Med Res 2012;40(4): p1617-26

Zhang JJ; Liu T; Peng F

Multiple paragangliomata of the lungs and temporal bone.
Ear Nose Throat J 2008 Nov;87(11): pE4-6
Sattar HA; Yang DL, et al.

Case No. 7, Accession No. 31524

March 2013

Fontana (Kaiser Foundation Hospital) - Mesothelioma
Glendale - Desmoplastic mesothelioma
Lakewood – Malignant mesothelioma
Long Beach (Long Beach VA) - Malignant mesothelioma
Livermore (St. Rose Hospital) - Mesothelioma
Oakland (Alameda County Medical Center) - Mesothelioma
Orinda (Kaiser Permanente) - Mesothelioma
Oxnard (St. John's Regional Medical Center) - Mesothelioma / Malignant mesothelioma
Santa Barbara (Miramonte Lab) - Mesothelioma
Woodland Hills (Kaiser Permanente) – Epithelioid mesothelioma
Arkansas (Associated Pathologists Laboratory) - Malignant mesothelioma
Delaware (Armed Forces Medical Examiner System) - Malignant mesothelioma
Florida (GastroEnterology Associates of Ocala) - Mesothelioma (epithelioid)
Georgia, Atlanta - Mesothelioma
Georgia Atlanta (Emory University Hospital) - Mesothelioma
Illinois (Heartland Regional Medical Center) - Malignant mesothelioma
Illinois, Oakbrook – Mesothelioma
Kansas, Manhattan (Peterson Laboratory) – Epithelioid mesothelioma / Mesothelioma
Massachusetts, Worcester (University of Massachusetts) – Malignant mesothelioma
Minnesota (Fairview Ridges Hospital) - Malignant mesothelioma
New York (Erie County Medical Center) - Mesothelioma
New York (SUNY Downstate Medical Center) - Malignant mesothelioma
New York (Buffalo General Hospital) - Malignant mesothelioma
Pennsylvania (Conemaugh Memorial Medical Center) - Mesothelioma
Pennsylvania (Lehigh Valley Hospital) - Mesothelioma
Pennsylvania (Magee Women's Hospital) - Mesothelioma
Puerto Rico, San Juan (University of Puerto Rico) – Mesothelioma, epithelioid
South Carolina (Medical University of South Carolina) - Malignant mesothelioma
Tennessee, Maryville - Epithelioid mesothelioma
Texas, Crystal Beach - Fibrous plaques with mesothelial reaction
Texas, Lubbock - Mesothelioma
Washington (Seattle VAMC) - Mesothelioma
West Virginia (Greenbrier Valley Medical Center) - Fibrous malignant mesothelioma
Wisconsin, Madison - Malignant mesothelioma
Wisconsin, Cross Plains (Medical Assessment and Consultations) - Epithelial mesothelioma, low grade
Australia (Royal Hobart Hospital) - Mesothelioma
Australia (Royal Prince Alfred Hospital) - Mesothelioma
Brazil (Rua Vicente Beghilli) - Epithelioid mesothelioma
Canada (Universite de Sherbrook) – Epithelioid mesothelioma, pleura
Canada (Pasqua Hospital) - Mesothelioma
Ireland (Bon Secours Tralee) - Mesothelioma
Ireland (Kerry General Hospital) - Malignant mesothelioma
Ireland (University College Hospital) - Diffuse mesothelioma
Japan (Asahi General Hospital) - Desmoplastic mesothelioma / Malignant mesothelioma
Japan (Setagaya-Ku) - Mesothelioma, epithelioid
Japan (Wakayama Medical University) - Malignant mesothelioma, biphasic type
Oman (Sultanate of Azaiba) - Mesothelioma
Saudi Arabia (King Fahad Hospital) - Malignant mesothelioma

Saudi Arabia (King Khalid University Hospital) - Malignant mesothelioma
United Kingdom (John Radcliffe Hospital) - Epithelioid mesothelioma

Case 7 - Diagnosis:

Malignant mesothelioma, pleura

Case 7 - References:

Postmortem findings of malignant pleural mesothelioma: a two-center study of 318 patients.
Chest 2012 Nov;142(5): p1267-73
Finn RS; Brims FJ, et al.

The separation of benign and malignant mesothelial proliferations.
Arch Pathol Lab Med 2012 Oct;136(10): p1217-26
Churg A; Galateau-Salle F

Diffuse malignant mesothelioma.
Arch Pathol Lab Med 2012 Aug;136(8): p882-8
Oviedo SP; Cagle PT

Diffuse pleural mesothelioma with epithelioid and angiosarcomatous components--a hitherto undescribed pattern of differentiation.
Histopathology 2012 Jun;60(7): p1164-6
Klabatsa A; Nicholson AG, et al.

Mesothelioma not associated with asbestos exposure.
Arch Pathol Lab Med 2012 Mar;136(3): p262-7
Jasani B; Gibbs A

Case No. 8, Accession No. 17432

March 2013

Fontana (Kaiser Foundation Hospital) - Aspiration
Glendale - Mineral oil granuloma
Lakewood - Lipoid aspiration pneumonia
Long Beach (Long Beach VA) - Lipoid pneumonia (Aspiration pneumonia)
Livermore (St. Rose Hospital) - Paraffinoma (Mineral oil granuloma)
Oakland (Alameda County Medical Center) - Lipoid pneumonia
Orinda (Kaiser Permanente) - Lipoid pneumonia
Oxnard (St. John's Regional Medical Center) - Exogenous lipoid pneumonia / Lipoid pneumonia from aspiration
Santa Barbara (Miramonte Lab) - Paraffinoma
Woodland Hills (Kaiser Permanente) - Lipoid pneumonia
Arkansas (Associated Pathologists Laboratory) - Sequestration with lipoid pneumonia
Delaware (Armed Forces Medical Examiner System) - Exogenous lipoid pneumonia
Florida (GastroEnterology Associates of Ocala) - Lipoid (aspiration) pneumonia
Georgia, Atlanta - Lipogranulomas
Georgia Atlanta (Emory University Hospital) - Lipoid pneumonia
Illinois (Heartland Regional Medical Center) - Lipoid (foreign body) granuloma
Illinois, Oakbrook - Lipoid aspiration bronchiolitis
Kansas, Manhattan (Peterson Laboratory) - Lipoid pneumonia
Massachusetts, Worcester (University of Massachusetts) - Lipoid pneumonia
Minnesota (Fairview Ridges Hospital) - Exogenous Lipoid pneumonia
New York (Erie County Medical Center) - Lipoid pneumonia
New York (SUNY Downstate Medical Center) - Lipoid pneumonia
New York (Buffalo General Hospital) - Exogenous lipoid pneumonia (oil granulomas of lung)
Pennsylvania (Conemaugh Memorial Medical Center) - Lipoid pneumonia

Pennsylvania (Lehigh Valley Hospital) - Mineral oil aspiration pneumonia
Pennsylvania (Magee Women's Hospital) - Lipid aspiration pneumonitis
Puerto Rico, San Juan (University of Puerto Rico) – Exogenous lipoid pneumonia
South Carolina (Medical University of South Carolina) - Lipid pneumonitis
Tennessee, Maryville - Exogenous lipid pneumonia
Texas, Crystal Beach - Interstitial lung disease (honeycomb lung with lymphoid hyperplasia)
Texas, Lubbock – Lymphoid nodular hyperplasia secondary to oil
Washington (Seattle VAMC) - Interstitial pneumonitis secondary to lipid aspiration
West Virginia (Greenbrier Valley Medical Center) - Lipoid pneumonia
Wisconsin, Madison - Lipoid pneumonia
Wisconsin, Cross Plains (Medical Assessment and Consultations) - Lipoid pneumonia
Australia (Royal Hobart Hospital) - Exogenous lipoid pneumonia
Australia (Royal Prince Alfred Hospital) – Exogenous lipoid pneumonia
Brazil (Rua Vicente Beghilli) - Lipoid pneumonia
Canada (Universite de Sherbrook) – Lipoid pneumonia, lung
Canada (Pasqua Hospital) - Lipoid pneumonia
Ireland (Bon Secours Tralee) - Lipoid pneumonia
Ireland (Kerry General Hospital) - Lipoid pneumonia
Ireland (University College Hospital) - Exogenous lipoid pneumonia
Japan (Asashi General Hospital) - Lipoid pneumonia / Oil aspiration pneumonia
Japan (Setagaya-Ku) - Foreign body granuloma
Japan (Wakayama Medical University) - Inflammatory pseudotumor due to mineral oil aspiration
Oman (Sultanate of Azaiba) - Lipoid pneumonia
Saudi Arabia (King Fahad Hospital) - Lipoid pneumonia
Saudi Arabia (King Khalid University Hospital) - Lipoid pneumonia
United Kingdom (John Radcliffe Hospital) - Mineral oil aspiration mass/pneumonitis

Case 8 - Diagnosis:

Lipid pneumonia (mineral oil or lipoid pneumonia), lung

Case 8 - References:

Exogenous lipoid pneumonia: an unexpected complication of substance abuse.
 Ann Intern Med 2008 Sep 2;149(5): p364-5
 Gurell MN; Kottmann RM, et al.

Exogenous lipoid pneumonia (oil granulomas of the lung).
 Pol J Pathol 2011 Dec;62(4): p269-73
 Papla B; Urbanczyk K, et al.

Lipoid pneumonia: an uncommon entity.
 Indian J Med Sci 2009 Oct;63(10): p474-80
 Khilnani GC; Hadda V

An unexpected consequence of electronic cigarette use.
 Chest 2012 Apr;141(4): p1110-3
 McCauley L; Markin C; Hosmer D

Image-guided aspiration cytodiagnosis of lipid pneumonia.
 Diagn Cytopathol 2004 Apr;30(4): p290-1
 Gupta RK; Cheung YK, et al.

Exogenous lipoid pneumonia caused by facial application of petrolatum.
 J Am Acad Dermatol 2003 Dec;49(6): p1128-30
 Cohen MA; Galbut B; Kerdel FA

Fontana (Kaiser Foundation Hospital) - Adenocarcinoma
Glendale - Adenocarcinoma
Lakewood – Adenocarcinoma with bronchial alveolar pattern
Long Beach (Long Beach VA) - Adenocarcinoma with bronchioloalveolar features
Livermore (St. Rose Hospital) - BAC with sclerosis
Oakland (Alameda County Medical Center) – Well-differentiated adenocarcinoma
Orinda (Kaiser Permanente) - Adenocarcinoma with bronchioloalveolar features
Oxnard (St. John’s Regional Medical Center) - Adenocarcinoma / Adenocarcinoma, low grade
Santa Barbara (Miramonte Lab) - Adenocarcinoma
Woodland Hills (Kaiser Permanente) – Invasive adenocarcinoma, lepidic predominant
Arkansas (Associated Pathologists Laboratory) - Invasive adenocarcinoma with bronchiole-alveolar growth patterns /
 Invasive adenocarcinoma
Delaware (Armed Forces Medical Examiner System) - Invasive lung adenocarcinoma, lepidic and acinar patterns
Florida (GastroEnterology Associates of Ocala) - Adenocarcinoma (tubular patterns)
Georgia, Atlanta - Bronchioloalveolar carcinoma
Georgia Atlanta (Emory University Hospital) – Adenocarcinoma, lepidic predominant growth pattern vs. LAM
Illinois (Heartland Regional Medical Center) - Adenocarcinoma, well differentiated with bronchioloalveolar growth pattern
Illinois, Oakbrook – Adenocarcinoma
Kansas, Manhattan (Peterson Laboratory) – Minimally invasive adenocarcinoma, lepidic pattern predominant
Massachusetts, Worcester (University of Massachusetts) – Invasive adenocarcinoma, lepidic predominant
Minnesota (Fairview Ridges Hospital) - Adenocarcinoma, predominantly lepidic growth
New York (Erie County Medical Center) - Apical Cap
New York (SUNY Downstate Medical Center) - Invasive adenocarcinoma, lepidic and acinar pattern
New York (Buffalo General Hospital) - Sclerosing hemangioma
Pennsylvania (Conemaugh Memorial Medical Center) - Minimally invasive carcinoma, lepidic predominant, nonmucinous
Pennsylvania (Lehigh Valley Hospital) - Bronchoalveolar carcinoma
Pennsylvania (Magee Women’s Hospital) - Adenocarcinoma, lepidic nonmucinous
Puerto Rico, San Juan (University of Puerto Rico) – Carcinoma in situ (BAC)/ acinar adenocarcinoma r/o adenoma
South Carolina (Medical University of South Carolina) - Adenocarcinoma, predominantly acinar pattern
Tennessee, Maryville - Bronchoalveolar carcinoma (adenocarcinoma in situ)
Texas, Crystal Beach - Carcinoma bronchioloalveolar
Texas, Lubbock – Bronchioloalveolar carcinoma
Washington (Seattle VAMC) - Interstitial fibrosis, focal
West Virginia (Greenbrier Valley Medical Center) - Bronchioloalveolar carcinoma
Wisconsin, Madison - Adenocarcinoma with pred. lepidic growth pattern nonmucinous type
Wisconsin, Cross Plains (Medical Assessment and Consultations) - Well differentiated adenocarcinoma, bronchioloalveolar type
Australia (Royal Hobart Hospital) - Adenocarcinoma acinar predominant type
Australia (Royal Prince Alfred Hospital) - Adenocarcinoma
Brazil (Rua Vicente Beghilli) - Non mucinous lepidic (in situ) and invasive acinar adenocarcinoma
Canada (Universite de Sherbrook) – Adenocarcinoma, lung
Canada (Pasqua Hospital) – Adenocarcinoma, arising in ACIS
Ireland (Bon Secours Tralee) - Bronchoalveolar carcinoma
Ireland (Kerry General Hospital) - Well differentiated adenocarcinoma
Ireland (University College Hospital) - Non-mucinous adenocarcinoma of the lung with acinar and lepidic growth patterns
Japan (Asashi General Hospital) - Bronchioloalveolar carcinoma / Minimally invasive adenocarcinoma
Japan (Setagaya-Ku) - Adenocarcinoma
Japan (Wakayama Medical University) - Adenocarcinoma, mixed subtype (BAC and papillary)
Oman (Sultanate of Azaiba) - Adenocarcinoma
Saudi Arabia (King Fahad Hospital) - Minimally invasive nonmucinous adenocarcinoma
Saudi Arabia (King Khalid University Hospital) - Atypical adenomatous hyperplasia

United Kingdom (John Radcliffe Hospital) - Adenocarcinoma with bronchoalveolar pattern

Case 9 - Diagnosis:

Invasive adenocarcinoma, lepidic predominant but also with bronchoalveolar pattern, lung

Case 9 - References:

Lepidic spread of primary lung adenocarcinoma on FDG-PET.

Clin Nucl Med 2004 Mar;29(3): p206-8

Gradinscak DJ; Fulham MJ, et al.

Invasive adenocarcinoma with bronchoalveolar features: a population-based evaluation of the extent of resection in bronchoalveolar cell carcinoma.

J Thorac Cardiovasc Surg 2012 Sep;144(3): p744; author reply 744-5

Srinathan SK

Adenosquamous carcinoma of the lung diagnosed by cytology?: a diagnostic dilemma.

Diagn Cytopathol 2012 Sep;40(9): p830-3

Shelton DA; Rana DN, et al.

Diffuse consolidation form of bronchoalveolar carcinoma.

J Coll Physicians Surg Pak 2010 Mar;20(3): p216-8

Khalil KF; Saeed W, et al.

Case No. 10, Accession No. 31507

March 2013

Fontana (Kaiser Foundation Hospital) - Choriocarcinoma

Glendale - Poorly differentiated carcinoma with trophoblastic differentiation

Lakewood – Metastatic choriocarcinoma

Long Beach (Long Beach VA) - Choriocarcinoma

Livermore (St. Rose Hospital) - Choriocarcinoma

Oakland (Alameda County Medical Center) - Choriocarcinoma

Orinda (Kaiser Permanente) - Choriocarcinoma, metastatic

Oxnard (St. John's Regional Medical Center) - Metastatic choriocarcinoma

Santa Barbara (Miramonte Lab) - Metastatic choriocarcinoma

Woodland Hills (Kaiser Permanente) - Choriocarcinoma

Arkansas (Associated Pathologists Laboratory) - Choriocarcinoma

Delaware (Armed Forces Medical Examiner System) - Metastatic choriocarcinoma

Florida (GastroEnterology Associates of Ocala) - Choriocarcinoma-metastatic

Georgia, Atlanta - Metastatic Choriocarcinoma

Georgia Atlanta (Emory University Hospital) - Choriocarcinoma

Illinois (Heartland Regional Medical Center) - Non-small cell carcinoma, poorly differentiated

Illinois, Oakbrook – Squamous Ca+ choriocarcinoma

Kansas, Manhattan (Peterson Laboratory) - Choriocarcinoma

Massachusetts, Worcester (University of Massachusetts) – Epithelioid trophoblastic tumor

Minnesota (Fairview Ridges Hospital) - Metastatic choriocarcinoma

New York (Erie County Medical Center) - Choriocarcinoma

New York (SUNY Downstate Medical Center) - Choriocarcinoma

New York (Buffalo General Hospital) - Primary choriocarcinoma of the lung

Pennsylvania (Conemaugh Memorial Medical Center) - Metastatic choriocarcinoma

Pennsylvania (Lehigh Valley Hospital) - Pleomorphic carcinoma

Pennsylvania (Magee Women's Hospital) - Poorly differentiated non small cell ca with squamoid features

Puerto Rico, San Juan (University of Puerto Rico) – Choriocarcinoma/ squamous cell carcinoma with features of choriocarcinoma

South Carolina (Medical University of South Carolina) - Choriocarcinoma

Tennessee, Maryville - Metastatic choriocarcinoma
Texas, Crystal Beach - Malignant teratoma with choriocarcinoma
Texas, Lubbock - Choriocarcinoma
Washington (Seattle VAMC) - Choriocarcinoma
West Virginia (Greenbrier Valley Medical Center) - Choriocarcinoma
Wisconsin, Madison - Pleomorphic lung carcinoma with HCG production
Wisconsin, Cross Plains (Medical Assessment and Consultations) - Squamous cell carcinoma with choriocarcinomatous differentiation
Australia (Royal Hobart Hospital) - Metastatic epithelioid trophoblastic tumor
Australia (Royal Prince Alfred Hospital) – Metastatic choriocarcinoma (differential: HCG producing large cell carcinoma)
Brazil (Rua Vicente Beghilli) - Squamous cell carcinoma choriocarcinoma features
Canada (Universite de Sherbrook) – Choriocarcinoma, lung
Canada (Pasqua Hospital) - Choriocarcinoma
Ireland (Bon Secours Tralee) - Squamous cell carcinoma
Ireland (Kerry General Hospital) - Choriocarcinoma
Ireland (University College Hospital) - Choriocarcinoma
Japan (Asashi General Hospital) - Choriocarcinoma / Metastatic choriocarcinoma
Japan (Setagaya-Ku) - Squamous cell carcinoma
Japan (Wakayama Medical University) - Epithelioid trophoblastic tumor
Oman (Sultanate of Azaiba) - Choriocarcinoma
Saudi Arabia (King Fahad Hospital) - Metastatic epithelioid trophoblastic tumor
Saudi Arabia (King Khalid University Hospital) - Choriocarcinoma
United Kingdom (John Radcliffe Hospital) - Primary pulmonary non-gestational choriocarcinoma

Case 10 - Diagnosis:

Choriocarcinoma, lung, rule out metastasis

Director's note: A small portion of yolk sac carcinoma was also found, but not presented on the study set slides. (drc)

Case 10 - References:

Primary pulmonary choriocarcinoma: case report and review of the literature.
 Gynecol Obstet Invest 2012;74(2): p171-6
 Serno J; Zeppernick F, et al.

Choriocarcinoma of the lung masquerading as a persisting pregnancy of unknown location (PUL).
 Aust N Z J Obstet Gynaecol 2012 Apr;52(2): p211-2
 Cohen S; Reid S, et al.

Solitary choriocarcinoma in the lung.
 J Thorac Oncol 2010 Apr;5(4): p574-5
 Berthod G; Bouzourene H, et al.

Primary choriocarcinoma of the lung manifesting as diffuse alveolar hemorrhage.
 Arch Pathol Lab Med 2006 Apr;130(4): p540-3
 Shintaku M; Hwang MH; Amitani R

Primary choriocarcinoma of the lung.
 J Thorac Cardiovasc Surg 2003 Jan;125(1): p193-6
 Arslanian A; Pischedda F, et al.

Primary pulmonary choriocarcinoma--a series of 7 cases.
 Indian J Pathol Microbiol 2004 Oct;47(4): p494-6
 Vaideeswar P; Mehta J; Deshpande J