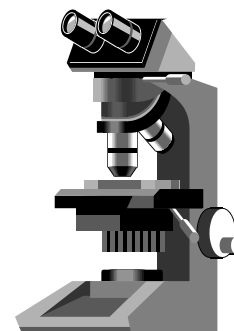


CALIFORNIA  
TUMOR TISSUE REGISTRY

## ***ENDOCRINE / THYROID PATHOLOGY***

Minutes – Subscription A

**May 2015**



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

Bergeron JP, Perry KD, et al. Endoscopic Ultrasound-Guided Pancreatic Fine-Needle Aspiration: Potential Pitfalls in One Institution's Experience of 1212 Procedures. *Cancer Cytopathol* 2015;123 (February): 98-107.

Chitkara Y. Upfront Special Staining for *Helicobacter pylori* in Gastric Biopsy Specimens Is Not Indicated. *Am J Clin Pathol* 2015; 143 (January): 84-88

Cannegieter SC, Horvath-Puho E, et al. Risk of Venous and Arterial Thrombotic Events in Patients Diagnosed With Superficial Vein Thrombosis: A Nationwide Cohort Study. *Blood* 2015; 125 (January 8): 229-235.

Larson AR, Cibas ES, et al. Uncovering Bias in the Cytologic Evaluation of Cervical Squamous Lesions. *Am J Clin Pathol* 2015; 143 (January): 143-148.

Arps DP, Chen S, et al. Selected Inflammatory Imitators of Mycosis Fungoides: Histologic Features and Utility of Ancillary Studies. *Arch Pathol Lab Med* 2014; 138 (October): 1319-1327.

Tajudeen BA, Arshi A, et al. Importance of Tumor Grade in Esthesioneuroblastoma Survival: A Population-Based Analysis. *JAMA Otolaryngol Head Neck Surg* 2014; 140 (December): 1124-1129.

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](mailto:cttr@linkline.com)  
Web site & Case of the Month: [www.cttr.org](http://www.cttr.org)

FILE DIAGNOSES

CTTR Subscription A

May 2015

**Case 1:** Neuroblastoma with extensive maturation / ganglioneuroblastoma, adrenal

**Case 2:** Pleomorphic adenoma (mixed tumor), left parapharyngeal

**Case 3:** Hashimoto thyroiditis, thyroid

**Case 4:** Immature teratoma, thyroid

**Case 5:** Lithium-associated diffuse thyroiditis and goiter

**Case 6:** Papillary carcinoma, classic variant, thyroid

**Case 7:** Minimally invasive (micro-invasive) follicular carcinoma, thyroid

**Case 8:** Follicular “Hurthle cell” carcinoma, thyroid

**Case 9:** Medullary carcinoma, thyroid

**Case 10:** Undifferentiated (anaplastic) carcinoma, thyroid

Bishop (Northern Inyo Hospital) - Ganglioneuroma  
Camarillo, Ca (St Johns Regional) - Ganglioneuroblastoma  
Fontana (Kaiser Foundation Hospital) - Ganglioneuroma  
Glendale - Ganglioneuroblastoma  
Lakewood – Adrenal, Neuroblastoma  
Livermore – Ganglioneuroblastoma  
Loma Linda (LLU Residents) - Ganglioneuroma  
Long Beach (Long Beach VA) - Neuroblastoma  
Oakland (ACMC) – Ganglioneuroblastoma (6)  
Palo Alto (VA Palo Alto) – Ganglioneuroma  
San Francisco (San Francisco General Hospital) - Ganglioneuroma  
San Francisco (UCSF) - Ganglioneuroma  
Santa Barbara (Miramonte Laboratory) - Ganglioneuroma  
Woodland Hills (Kaiser Permanente) - Ganglioneuroblastoma  
Arkansas, El Dorado (Associated Path Lab) – Ganglioneuroblastoma  
Colorado, Fort Collins - Ganglioneuroma  
Delaware, Newark (AFMES) – Ganglioneuroblastoma  
Florida (Munroe Hospital) - Ganglioneuroma  
Florida (GastroEnterology Associates of Ocala) - Ganglioneuroblastoma  
Georgia, Atlanta - Ganglioneuroblastoma  
Georgia (Wellstar Healthcare System) - Ganglioneuroblastoma (4)  
Illinois (Heartland Regional Medical Center) - Ganglioneuroblastoma  
Iowa (Allen Memorial Hospital) - Ganglioneuroblastoma  
Kansas (Peterson Labs) – Ganglioneuroblastoma (2)  
Louisiana (LSUHC) - Ganglioneuroma  
Maryland (University of Maryland Medical System) - Ganglioneuroblastoma, schwannian stroma rich  
Minnesota (Fairview Ridges Hospital) - Ganglioneuroblastoma  
Mississippi (The University of Mississippi Medical Center) - Ganglioneuroblastoma  
Nebraska (Creighton University Medical Center) - Ganglioneuroblastoma  
North Carolina (Eastern Carolina Pathology) – Pheochromocytoma  
North Carolina, Clemmons – Ganglioneuroblastoma  
Ohio, (Summa Health Residents) – Ganglioneuroblastoma (2) v Ganglioneuroma (2)  
Ohio, Toledo – Ganglioneuroblastoma  
Ohio, Union Town - Ganglioneuroma  
Pennsylvania (Drexel University College of Medicine Residents) - Ganglioneuroma  
Pennsylvania (Lehigh Valley Hospital) - Ganglioneuroma  
Puerto Rico (University of Puerto Rico) – Intermixed ganglioneuroblastoma  
Texas, Crystal Beach - Neuroblastoma  
Texas, Lubbock - Ganglioneuroblastoma  
Texas (Baylor Scott & White) – Ganglioneuroma vs mostly differentiated ganglioneuroblastoma  
Washington (Sound Pathology Associates) – Differentiating neuroblastoma  
West Virginia (Greenbrier Valley Medical Center) - Ganglioneuroma  
Australia (Royal Hobart Hospital) - Ganglioneuroma  
Australia (Royal Prince Alfred Hospital) - Ganglioneuroblastoma  
Ireland (Bon Secours Hospital) – Ganglioneuroma  
Ireland (Kerry General Hospital) - Ganglioneuroblastoma  
Ireland (Mayo General Hospital) - Ganglioneuroma  
Japan (Asahi General Hospital) - Ganglioneuroma  
Japan (Lions Mansion) – Ganglioneuroma, schwannian stroma-dominant, mature, left adrenal  
Japan - Ganglioneuroma  
Oman (Khoula Hospital) - Ganglioneuroma  
Spain (CHIVI Hospital) - Ganglioneuroblastoma

**Case 1 - Diagnosis:** Neuroblastoma with extensive maturation / ganglioneuroblastoma, adrenal

Case 1 - References:

A composite pheochromocytoma/ganglioneuroblastoma of the adrenal gland.  
Pediatr Blood Cancer 2010 Jul 1;54(7): p1032-4  
Thiel EL; Trost BA; Tower RL

Adult-onset adrenal ganglioneuroblastoma - Bone metastasis two years after surgery: report of a case.  
Surg Today 2010 May;40(5): p482-6  
Mizuno S; Iida T; Fujita S

Thymoma with ganglioneuroblastomatous component: case report.  
Virchows Arch 2008 Mar;452(3): p319-24  
Kashiwabara K; Ikota H, et al.

Retroperitoneal ganglioneuroblastoma resected 8 years after mass screening: a case report.  
J Pediatr Surg 2007 Nov;42(11): pE29-32  
Nakaoka T; Uemura S, et al.

Life-threatening complications of an extremely rare tumor of the kidney: adult-type primary renal ganglioneuroblastoma.  
South Med J 2007 Aug;100(8): p852-3  
Kurt E; Filiz G, et al.

Metastatic ganglioneuroblastoma in head and neck diagnosed by fine needle aspiration: a case report.  
Acta Cytol 2007 May-Jun;51(3): p429-33  
Daneshbod Y; Khojasteh HN, et al.

A rare ganglioneuroblastoma secreting dopamine and the value of its measurement in diagnosis and prognosis.  
Ann Clin Biochem 2006 Jan;43(Pt 1): p73-6  
Sargazi M; Smith ML, et al.

**Case No. 2, Accession No. 31863**

**May 2015**

Bishop (Northern Inyo Hospital) - Pleomorphic adenoma  
Camarillo, Ca (St Johns Regional) - Mixed tumor  
Fontana (Kaiser Foundation Hospital) - Pleomorphic adenoma  
Glendale - Benign mixed tumor  
Lakewood – Salivary gland, pleomorphic adenoma  
Livermore – Pleomorphic adenoma (with adenoid cystic like areas)  
Loma Linda (LLU Residents) – Pleomorphic adenoma  
Long Beach (Long Beach VA) – Pleomorphic adenoma  
Oakland (ACMC) – Benign mixed tumor (Pleomorphic adenoma) (6)  
Palo Alto (VA Palo Alto) – Pleomorphic adenoma  
San Francisco (San Francisco General Hospital) - Pleomorphic Adenoma  
San Francisco (UCSF) - Pleomorphic adenoma  
Santa Barbara (Miramonte Laboratory) - Pleomorphic adenoma  
Woodland Hills (Kaiser Permanente) - Pleomorphic adenoma  
Arkansas, El Dorado (Associated Path Lab) – Pleomorphic adenoma  
Colorado, Fort Collins - Benign mixed tumor  
Delaware, Newark (AFMES) – Pleomorphic adenoma  
Florida (Munroe Hospital) – Pleomorphic adenoma  
Florida (GastroEnterology Associates of Ocala) - Pleomorphic Adenoma  
Georgia, Atlanta - Pleomorphic adenoma  
Georgia (Wellstar Healthcare System) - Pleomorphic adenoma (4)

Illinois (Heartland Regional Medical Center) - Pleomorphic adenoma  
Iowa (Allen Memorial Hospital) - Pleomorphic adenoma  
Kansas (Peterson Labs) – Pleomorphic adenoma (2)  
Louisiana (LSUHC) – Pleomorphic adenoma  
Maryland (University of Maryland Medical System) - Mixed tumor  
Minnesota (Fairview Ridges Hospital) - Pleomorphic adenoma  
Mississippi (The University of Mississippi Medical Center) - Pleomorphic adenoma  
Nebraska (Creighton University Medical Center) - Pleomorphic adenoma  
North Carolina (Eastern Carolina Pathology) – Pleomorphic adenoma  
North Carolina, Clemmons – Pleomorphic adenoma  
Ohio, (Summa Health Residents) –Pleomorphic adenoma  
Ohio, Toledo – Pleomorphic adenoma  
Ohio, Union Town – Pleomorphic adenoma  
Pennsylvania (Drexel University College of Medicine Residents) - Pleomorphic adenoma  
Pennsylvania (Lehigh Valley Hospital) - Pleomorphic adenoma  
Puerto Rico (University of Puerto Rico) – Pleomorphic adenoma  
South Carolina (Medical University of South Carolina) -  
Texas, Crystal Beach - Cellular mixed tumor salivary gland  
Texas, Lubbock - Pleomorphic adenoma  
Texas (Baylor Scott & White) – Pleomorphic adenoma  
Washington (Sound Pathology Associates) – Pleomorphic adenoma  
West Virginia (Greenbrier Valley Medical Center) - Pleomorphic Adenoma  
Australia (Royal Hobart Hospital) - Pleomorphic adenoma  
Australia (Royal Prince Alfred Hospital) - Pleomorphic adenoma  
Ireland (Bon Secours Hospital) – Pleomorphic adenoma  
Ireland (Kerry General Hospital) - Pleomorphic salivary adenoma  
Ireland (Mayo General Hospital) - Mixed tumor of salivary gland (Pleomorphic Adenoma)  
Japan (Asahi General Hospital) - Pleomorphic adenoma  
Japan (Lions Mansion) – Pleomorphic adenoma, left parapharyngeal tissue  
Japan – Parathyroid adenoma  
Oman (Khoula Hospital) – Pleomorphic adenoma  
Spain (CHIVI Hospital) - Pleomorphic adenoma

**Case 2 - Diagnosis:** Pleomorphic adenoma (mixed tumor), left parapharyngeal

Case 2 - References:

Simultaneous pleomorphic adenoma of the left parotid gland and adenoid cystic carcinoma of the contralateral sublingual salivary gland: a case report.

Oral Maxillofac Surg 2009 Dec;13(4): p221-4  
 Papadogeorgakis N; Kalfarentzos EF, et al.

Update on selected salivary gland neoplasms.

Arch Pathol Lab Med 2009 Nov;133(11): p1763-74  
 McHugh JB; Visscher DW; Barnes EL

Recurrence of pleomorphic adenoma of the palate after sixteen years: case report and an analysis of the literature.

J Biol Regul Homeost Agents 2009 Oct-Dec;23(4): p225-9  
 Berardi D; Scoccia A, et al.

Pleomorphic adenoma with mucinous and squamous differentiation: a mimicker of mucoepidermoid carcinoma.

Int J Surg Pathol 2009 Aug;17(4): p335-7  
 Guo SP; Cheuk W; Chan JK

Adenoid cystic carcinoma ex pleomorphic adenoma of the parotid gland.

Head Neck Pathol 2009 Jun;3(2): p159-62  
 Ide F; Mishima K, et al.

Bishop (Northern Inyo Hospital) - Hashimotos thyroiditis  
Camarillo, Ca (St Johns Regional) - Chronic thyroiditis  
Fontana (Kaiser Foundation Hospital) - Hashimoto thyroiditis  
Glendale - Hashimotos thyroiditis  
Lakewood – Hashimotos thyroiditis  
Livermore – Hashimoto disease  
Loma Linda (LLU Residents) – Goiter involved by chronic lymphocytic thyroiditis (Hashimotos thyroiditis)  
Long Beach (Long Beach VA) – Hashimotos thyroiditis  
Oakland (ACMC) – Nodular hyperplasia (6)  
Palo Alto (VA Palo Alto) – Hashimotos thyroiditis/Chronic lymphocytic thyroiditis  
San Francisco (San Francisco General Hospital) - Chronic lymphocytic thyroiditis  
San Francisco (UCSF) - Chronic lymphocytic thyroiditis  
Santa Barbara (Miramonte Laboratory) - Lymphocytic thyroiditis  
Woodland Hills (Kaiser Permanente) - Lymphocytic thyroiditis  
Arkansas, El Dorado (Associated Path Lab) – Hashimotos thyroiditis  
Colorado, Fort Collins - Lymphocytic thyroiditis  
Delaware, Newark (AFMES) – Hashimotos thyroiditis  
Florida (Munroe Hospital) – Hashimotos thyroiditis  
Florida (GastroEnterology Associates of Ocala) - Chronic lymphocytic thyroiditis “Thyroiditis with hyperplasia”  
Georgia, Atlanta - Lymphocytic thyroiditis  
Georgia (Wellstar Healthcare System) - Hashimotos thyroiditis / Lymphocytic thyroiditis (2) / Nodular hyperplasia, thyroiditis  
Illinois (Heartland Regional Medical Center) - Adenomatous nodules and Hashimotos thyroiditis  
Iowa (Allen Memorial Hospital) - Lymphocytic thyroiditis  
Kansas (Peterson Labs) – Lymphocytic thyroiditis / Hashimotos thyroiditis  
Louisiana (LSUHC) – Nodular goiter  
Maryland (University of Maryland Medical System) - Goiter with Hashimotos thyroiditis  
Minnesota (Fairview Ridges Hospital) - Hashimotos thyroiditis with nodular hyperplasia  
Mississippi (The University of Mississippi Medical Center) - Lymphocytic thyroiditis  
Nebraska (Creighton University Medical Center) - Hashimotos thyroiditis  
North Carolina (Eastern Carolina Pathology) – Hashimoto thyroiditis  
North Carolina, Clemmons – Adenomatoid nodules with lymphocytic thyroiditis  
Ohio, (Summa Health Residents) – Chronic lymphocytic thyroiditis  
Ohio, Toledo – Hashimoto’s Thyroiditis  
Ohio, Union Town – Hashimoto’s Thyroiditis  
Pennsylvania (Drexel University College of Medicine Residents) - Lymphocytic thyroiditis  
Pennsylvania (Lehigh Valley Hospital) - Goiter with lymphocytic thyroiditis  
Puerto Rico (University of Puerto Rico) – Nodular lymphocytic thyroiditis  
South Carolina (Medical University of South Carolina) -  
Texas, Crystal Beach - Hashimoto thyroiditis  
Texas, Lubbock - Hashimoto thyroiditis  
Texas (Baylor Scott & White) – Nodular goiter with lymphocytic thyroiditis  
Washington (Sound Pathology Associates) – Chronic lymphocytic thyroiditis  
West Virginia (Greenbrier Valley Medical Center) - Hashimoto thyroiditis  
Australia (Royal Hobart Hospital) - Hashimotos thyroiditis  
Australia (Royal Prince Alfred Hospital) - Hashimoto thyroiditis  
Ireland (Bon Secours Hospital) – Hashimoto’s thyroiditis  
Ireland (Kerry General Hospital) - Lymphocytic thyroiditis  
Ireland (Mayo General Hospital) - Lymphocytic / Hashimotos thyroiditis  
Japan (Asahi General Hospital) - Hashimoto thyroiditis

Japan (Lions Mansion) – Adenomatous goiter, thyroid  
Japan – Nodular hyperplasia  
Oman (Khoula Hospital) – Nodular hyperplasia with lymphocytic thyroiditis  
Spain (CHIVI Hospital) - Lymphocytic thyroiditis

**Case 3 - Diagnosis:** Hashimoto thyroiditis, thyroid

Director's note: *We no longer are putting possessives in our diagnoses. For example: it's now "Hashimoto thyroiditis" not "Hashimoto's thyroiditis". Hodgkin's disease is now "Hodgkin disease", etc.* (drc)

Case 3 - References:

The natural history of euthyroid Hashimoto's thyroiditis in children.  
J Pediatr 2006 Dec;149(6): p827-32  
Radetti G; Gottardi E, et al.

Cervical lymphadenopathy associated with Hashimoto's thyroiditis: an analysis of 22 cases by fine needle aspiration cytology.  
Acta Cytol 2009 Sep-Oct;53(5): p491-6  
Paksoy N; Yazal K

Coexistence of chronic lymphocytic leukemia and Hashimoto's thyroiditis.  
Ann Hematol 2006 Nov;85(11): p811-2  
Beyan C; Kaptan K; Ifran A

Hashimoto's thyroiditis in children and adolescents: a retrospective study on clinical, epidemiological and laboratory properties of the disease.  
J Pediatr Endocrinol Metab 2007 Nov;20(11): p1199-205  
Demirbilek H; Kandemir N, et al.

Increased incidence of well-differentiated thyroid cancer associated with Hashimoto thyroiditis and the role of the PI3k/Akt pathway.  
J Am Coll Surg 2007 May;204(5): p764-73; discussion 773-5  
Larson SD; Jackson LN, et al.

**Case No. 4, Accession No. 31969**

**May 2015**

Bishop (Northern Inyo Hospital) - Thymic mature teratoma  
Camarillo, Ca (St Johns Regional) - Wilms tumor  
Fontana (Kaiser Foundation Hospital) - Immature teratoma  
Glendale - Angioinvasive encapsulated follicular carcinoma  
Lakewood – Immature teratoma  
Livermore – Immature teratoma, thymus  
Loma Linda (LLU Residents) – Benign Mature teratoma  
Long Beach (Long Beach VA) – Immature teratoma  
Oakland (ACMC) – Immature Teratoma(6)  
Palo Alto (VA Palo Alto) – Mature teratoma  
San Francisco (San Francisco General Hospital) - Immature Teratoma  
San Francisco (UCSF) - Immature teratoma  
Santa Barbara (Miramonte Laboratory) - Follicle atrophy  
Woodland Hills (Kaiser Permanente) - (Immature) teratoma  
Arkansas, El Dorado (Associated Path Lab) – Immature teratoma  
Colorado, Fort Collins - Immature teratoma  
Delaware, Newark (AFMES) – Immature teratoma

Florida (Munroe Hospital) – Immature teratoma  
Florida (GastroEnterology Associates of Ocala) - Malignant teratoma  
Georgia, Atlanta - Immature teratoma  
Georgia (Wellstar Healthcare System) - Teratoma / Immature teratoma (2)/ Neural neoplasm  
Illinois (Heartland Regional Medical Center) - Immature teratoma  
Iowa (Allen Memorial Hospital) - Immature teratoma  
Kansas (Peterson Labs) – Immature Teratoma (2)  
Louisiana (LSUHC) - Teratoma  
Maryland (University of Maryland Medical System) - Teratoma  
Minnesota (Fairview Ridges Hospital) - Immature teratoma  
Mississippi (The University of Mississippi Medical Center) - Immature teratoma  
Nebraska (Creighton University Medical Center) - Papillary thyroid carcinoma  
North Carolina (Eastern Carolina Pathology) – Thyroglossal duct cyst  
North Carolina, Clemmons – Immature teratoma  
Ohio, (Summa Health Residents) – Congenital teratoma  
Ohio, Toledo – Teratoma, immature  
Ohio, Union Town – Congenital teratoma  
Pennsylvania (Drexel University College of Medicine Residents) - Immature teratoma  
Pennsylvania (Lehigh Valley Hospital) - Teratoma  
Puerto Rico (University of Puerto Rico) – Immature teratoma  
South Carolina (Medical University of South Carolina) -  
Texas, Crystal Beach - Teratoma  
Texas, Lubbock - Immature teratoma  
Texas (Baylor Scott & White) – Immature teratoma  
Washington (Sound Pathology Associates) - Teratoma  
West Virginia (Greenbrier Valley Medical Center) - Teratoma  
Australia (Royal Hobart Hospital) - Immature teratoma  
Australia (Royal Prince Alfred Hospital) - Minimally invasive follicular carcinoma  
India (Sri Siddhartha Medical College) -  
Ireland (Bon Secours Hospital) – Immature teratoma  
Ireland (Kerry General Hospital) - Immature teratoma  
Ireland (Mayo General Hospital) - Immature teratoma  
Japan (Asahi General Hospital) - Mature teratoma  
Japan (Lions Mansion) – Immature teratoma, anterior neck  
Japan – Teratoma  
Oman (Khoula Hospital) – Immature teratoma  
Spain (CHIVI Hospital) - Immature teratoma

**Case 4 - Diagnosis:** Immature teratoma, thyroid

Case 4 - References:

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.

Congenital cervical immature teratoma arising in the left lobe of the thyroid gland.  
APMIS 2007 Jan;115(1): p75-9  
Oka K; Okane M, et al.

Teratomas of the neck and mediastinum in children.  
Pediatr Surg Int 2006 Aug;22(8): p627-34  
Martino F; Avila LF, et al.

Malignant thyroid teratoma: report of an aggressive tumor in a 64-year-old man.  
Endocr Pathol 2013 Sep;24(3): p132-5  
Vilallonga R; Zafon C, et al.



Intracranial teratomas in children: a clinicopathological study.  
Childs Nerv Syst 2013 Nov;29(11): p2035-42  
Goyal N; Kakkar A, et al.

**Case No. 5, Accession No. 31968**

**May 2015**

Bishop (Northern Inyo Hospital) - Papillary thyroid carcinoma  
Camarillo, Ca (St Johns Regional) - Radiation changes  
Fontana (Kaiser Foundation Hospital) - Benign  
Glendale - Hurthle cell nodule  
Lakewood - Adenomatous goiter with C cell hyperplasia  
Livermore - Lithium induced goiter  
Loma Linda (LLU Residents) - Lithium Thyroiditis  
Long Beach (Long Beach VA) - Adenomatous goiter : C cell hyperplasia  
Oakland (ACMC) - Lithium induced nodular hyperplasia (6)  
Palo Alto (VA Palo Alto) - Lithium induced thyroiditis  
San Francisco (San Francisco General Hospital) - Adenomatoid goiter  
San Francisco (UCSF) - Adenomatous hyperplasia/multinodular goiter  
Santa Barbara (Miramonte Laboratory) - Papillary carcinoma  
Woodland Hills (Kaiser Permanente) - Adenomatoid nodule  
Arkansas, El Dorado (Associated Path Lab) - Lithium induced goiter  
Colorado, Fort Collins - Dyshormonogenetic goiter  
Delaware, Newark (AFMES) - Multinodular Hyperplasia  
Florida (Munroe Hospital) - Lithium induced goiter  
Florida (GastroEnterology Associates of Ocala) - Chronic thyroiditis; drug associated  
Georgia, Atlanta - Adenomatoid nodules  
Georgia (Wellstar Healthcare System) - Goiter / C-cell hyperplasia (2) / Drug/Lithium toxicity  
Illinois (Heartland Regional Medical Center) - Nodular hyperplasia and slight chronic thyroiditis  
Iowa (Allen Memorial Hospital) - Lithium-induced goiter  
Kansas (Peterson Labs) - Nodular C-cell hyperplasia (2)  
Louisiana (LSUHC) - Dyshormonogenetic goiter vs C-Cell hyperplasia  
Maryland (University of Maryland Medical System) - Lithium thyroiditis  
Minnesota (Fairview Ridges Hospital) - Lymphocytic thyroiditis ? Lithium-induced  
Mississippi (The University of Mississippi Medical Center) - Reactive follicular change consistent with lithium effect  
Nebraska (Creighton University Medical Center) - Hurthle cell adenoma  
North Carolina (Eastern Carolina Pathology) - C-Cell hyperplasia  
North Carolina, Clemmons - Lithium-associated silent thyroiditis  
Ohio, (Summa Health Residents) - Multinodular goiter  
Ohio, Toledo - Goiter  
Ohio, Union Town - Lithium related multinodular goiter  
Pennsylvania (Drexel University College of Medicine Residents) - Goitrous nodule  
Pennsylvania (Lehigh Valley Hospital) - Patchy atrophy  
Puerto Rico (University of Puerto Rico) - Lithium thyroiditis  
South Carolina (Medical University of South Carolina) -  
Texas, Crystal Beach - Follicular variant papillary carcinoma  
Texas, Lubbock - nodular goiter  
Texas (Baylor Scott & White) - Lithium thyroiditis  
Washington (Sound Pathology Associates) - Dyshormonogenetic goiter, drug induced  
West Virginia (Greenbrier Valley Medical Center) - Goiter  
Australia (Royal Hobart Hospital) - Lithium associated focal thyroiditis  
Australia (Royal Prince Alfred Hospital) - Minimally invasive Hurthle cell carcinoma  
Ireland (Bon Secours Hospital) - Multinodular goiter  
Ireland (Kerry General Hospital) - Lithium-related thyroid goiter  
Ireland (Mayo General Hospital) - Thyroid hyperplasia

Japan (Asahi General Hospital) - Dyshormonogenetic goiter  
Japan (Lions Mansion) – Non-specific lymphocytic thyroiditis; possibly lithium-associated thyroiditis, thyroid  
Japan – Granulomatous thyroiditis  
Oman (Khoula Hospital) – Dominant nodule of multinodular goiter  
Spain (CHIVI Hospital) - Goiter related to lithium

**Case 5 - Diagnosis:** Lithium-associated diffuse thyroiditis and goiter

**Case 5 - References:**

Lithium-associated hypothyroidism and thyroid papillary carcinoma: a case report.  
South Med J 2006 Mar;99(3): p279-81  
Aksoy S; Kilickap S; Erman M

Spectrum of lithium induced thyroid abnormalities: a current perspective.  
Thyroid Res 2013;6(1): p3  
Kibirige D; Luzinda K; Ssekitoleko R

Lithium-associated hyperthyroidism.  
Hosp Pract (1995 2013 Aug;41(3): p101-4  
Siyam FF; Deshmukh S; Garcia-Touza M

Incidence rate of symptomatic painless thyroiditis presenting with thyrotoxicosis in Denmark as evaluated by consecutive thyroid scintigraphies.  
Scand J Clin Lab Invest 2013 Apr;73(3): p240-4  
Schwartz F; Bergmann N, et al.

Possible dangers of a "nutritional supplement" lithium orotate.  
Ann Clin Psychiatry 2013 Feb;25(1): p71  
Balon R

**Case No. 6, Accession No. 31760**

**May 2015**

Bishop (Northern Inyo Hospital) - Papillary thyroid carcinoma  
Camarillo, Ca (St Johns Regional) - Papillary Carcinoma  
Fontana (Kaiser Foundation Hospital) - Papillary thyroid ca  
Glendale - Medullary carcinoma  
Lakewood – Papillary thyroid carcinoma  
Livermore – Papillary carcinoma, thyroid  
Loma Linda (LLU Residents) – Classical Papillary thyroid carcinoma  
Long Beach (Long Beach VA) – Papillary thyroid carcinoma  
Oakland (ACMC) – Papillary thyroid carcinoma (6)  
Palo Alto (VA Palo Alto) – Papillary thyroid carcinoma with lymphovascular space invasion  
San Francisco (San Francisco General Hospital) - Papillary thyroid carcinoma  
San Francisco (UCSF) - Papillary thyroid carcinoma, diffuse sclerosing variant  
Santa Barbara (Miramonte Laboratory) - Papillary carcinoma  
Woodland Hills (Kaiser Permanente) - Papillary thyroid carcinoma  
Arkansas, El Dorado (Associated Path Lab) – Papillary carcinoma  
Colorado, Fort Collins - Papillary thyroid carcinoma  
Delaware, Newark (AFMES) – Papillary thyroid carcinoma  
Florida (Munroe Hospital) – Papillary carcinoma  
Florida (GastroEnterology Associates of Ocala) - Papillary Carcinoma  
Georgia, Atlanta - Dyshormonogenetic goiter  
Georgia (Wellstar Healthcare System) - PTC (4)  
Illinois (Heartland Regional Medical Center) - Papillary carcinoma

Iowa (Allen Memorial Hospital) - Papillary thyroid carcinoma  
Kansas (Peterson Labs) – Papillary carcinoma / Papillary Thyroid Carcinoma  
Louisiana (LSUHC) – Papillary thyroid carcinoma  
Maryland (University of Maryland Medical System) - Classical papillary thyroid carcinoma  
Minnesota (Fairview Ridges Hospital) - Papillary thyroid carcinoma  
Mississippi (The University of Mississippi Medical Center) - Papillary carcinoma  
Nebraska (Creighton University Medical Center) - Medullary carcinoma  
North Carolina (Eastern Carolina Pathology) – Papillary thyroid carcinoma, tall cell variant  
North Carolina, Clemmons – Papillary carcinoma  
Ohio, (Summa Health Residents) – Papillary thyroid carcinoma, classic variant  
Ohio, Toledo – Papillary thyroid carcinoma  
Ohio, Union Town – Papillary carcinoma, follicular variant  
Pennsylvania (Drexel University College of Medicine Residents) - Papillary thyroid carcinoma  
Pennsylvania (Lehigh Valley Hospital) - Papillary carcinoma  
Puerto Rico (University of Puerto Rico) – Papillary thyroid carcinoma, classic type  
South Carolina (Medical University of South Carolina) -  
Texas, Crystal Beach - Papillary carcinoma tall cell variety  
Texas, Lubbock - Papillary carcinoma, tall cell variant  
Texas (Baylor Scott & White) – Papillary thyroid carcinoma  
Washington (Sound Pathology Associates) – Papillary thyroid carcinoma  
West Virginia (Greenbrier Valley Medical Center) - Papillary carcinoma  
Australia (Royal Hobart Hospital) - Papillary carcinoma  
Australia (Royal Prince Alfred Hospital) - Medullary carcinoma  
Ireland (Bon Secours Hospital) – Papillary carcinoma  
Ireland (Kerry General Hospital) - Papillary carcinoma  
Ireland (Mayo General Hospital) - Papillary carcinoma of thyroid gland  
Japan (Asahi General Hospital) - Tall cell variant of papillary carcinoma  
Japan (Lions Mansion) – Papillary carcinoma, thyroid  
Japan – Follicular adenoma  
Oman (Khoula Hospital) – Papillary carcinoma thyroid  
Spain (CHIVI Hospital) - Papillary carcinoma

**Case 6 - Diagnosis:** Papillary carcinoma, classic variant, thyroid

Case 6 - References:

Is Hashimoto's thyroiditis a prognostic factor for thyroid papillary microcarcinoma?  
 Eur Rev Med Pharmacol Sci 2014 Jul;18(13): p1910-5  
 Bircan HY; Koc B, et al.

Pathologic spectrum of lymphocytic infiltration and recurrence of papillary thyroid carcinoma.  
 Yonsei Med J (Korea 2014 Jul;55(4): p879-85  
 Kim HG; Kim EK, et al.

Study of the histological profile of papillary thyroid carcinomas associated with Hashimoto's thyroiditis.  
 Arq Bras Endocrinol Metabol 2013 Aug;57(6): p445-9  
 Cordioli MI; Cury AN, et al.

The role of IgG4 (+) plasma cells in the association of Hashimoto's thyroiditis with papillary carcinoma.  
 APMIS 2014 Dec;122(12): p1259-65  
 Tasli F; Ozkok G, et al.

Hashimoto's thyroiditis as a risk factor of papillary thyroid cancer may improve cancer prognosis.  
 Otolaryngol Head Neck Surg 2013 Mar;148(3): p396-402  
 Lun Y; Wu X, et al.

Bishop (Northern Inyo Hospital) - Microfollicular adenoma with atypical features  
Camarillo, Ca (St Johns Regional) - Follicular variant , papillary ca  
Fontana (Kaiser Foundation Hospital) - Papillary carcinoma, follicular variant  
Glendale - Anaplastic carcinoma  
Lakewood – Follicular carcinoma with capsular and vascular invasion  
Livermore – Follicular carcinoma, thyroid  
Loma Linda (LLU Residents) – Follicular carcinoma  
Long Beach (Long Beach VA) – Follicular carcinoma  
Oakland (ACMC) – Follicular neoplasm. Favor follicular adenoma (6)  
Palo Alto (VA Palo Alto) – Follicular adenoma  
San Francisco (San Francisco General Hospital) - Follicular Carcinoma  
San Francisco (UCSF) - Papillary thyroid carcinoma, follicular variant  
Santa Barbara (Miramonte Laboratory) - Follicular carcinoma  
Woodland Hills (Kaiser Permanente) - Follicular thyroid carcinoma  
Arkansas, El Dorado (Associated Path Lab) – Minimally invasive follicular carcinoma  
Colorado, Fort Collins - Follicular carcinoma  
Delaware, Newark (AFMES) – Follicular variant of papillary thyroid carcinoma  
Florida (Munroe Hospital) – Follicular variant of papillary carcinoma  
Florida (GastroEnterology Associates of Ocala) - Follicular Carcinoma : Minimally invasive  
Georgia, Atlanta - Dysshormonogenetic goiter  
Georgia (Wellstar Healthcare System) - Follicular carcinoma with vascular invasion / Follicular Carcinoma (3)  
Illinois (Heartland Regional Medical Center) - Follicular neoplasm, well differentiated  
Iowa (Allen Memorial Hospital) - Encapsulated follicular neoplasm  
Kansas (Peterson Labs) – Atypical follicular neoplasm / Follicular variant papillary thyroid carcinoma  
Louisiana (LSUHC) – Insular carcinoma  
Maryland (University of Maryland Medical System) - Follicular carcinoma with Hurthle cell features, suggestive of widely vascular invasive variant  
Minnesota (Fairview Ridges Hospital) - Follicular carcinoma  
Mississippi (The University of Mississippi Medical Center) - Follicular neoplasm  
Nebraska (Creighton University Medical Center) - Anaplastic carcinoma  
North Carolina (Eastern Carolina Pathology) – Follicular adenoma  
North Carolina, Clemmons – Follicular carcinoma  
Ohio, (Summa Health Residents) – Minimally invasive follicular thyroid carcinoma  
Ohio, Toledo – Hurthle cell carcinoma, minimally invasive  
Ohio, Union Town – Follicular carcinoma  
Pennsylvania (Drexel University College of Medicine Residents) - Follicular carcinoma, minimally invasive  
Pennsylvania (Lehigh Valley Hospital) - Poorly differentiated follicular carcinoma  
Puerto Rico (University of Puerto Rico) – Minimally invasive follicular carcinoma, r/o papillary carcinoma component  
South Carolina (Medical University of South Carolina) -  
Texas, Crystal Beach - Microfollicular tumor with carcinoma focal  
Texas, Lubbock - Papillary carcinoma, follicular variant  
Texas (Baylor Scott & White) – Follicular carcinoma  
Washington (Sound Pathology Associates) – Papillary carcinoma, follicular variant arising in follicular adenoma  
West Virginia (Greenbrier Valley Medical Center) - Follicular carcinoma  
Australia (Royal Hobart Hospital) - Follicular lesion – probable follicular adenoma  
Australia (Royal Prince Alfred Hospital) - Anaplastic carcinoma  
Ireland (Bon Secours Hospital) – Follicular variant papillary carcinoma  
Ireland (Kerry General Hospital) - Minimally invasive follicular carcinoma  
Ireland (Mayo General Hospital) - Follicular carcinoma  
Japan (Asahi General Hospital) - Oncocytic adenoma  
Japan (Lions Mansion) – Mixed medullary and follicular cell carcinoma, thyroid  
Japan – Follicular adenoma  
Oman (Khoula Hospital) – Oncocytic / Hurthle cell neoplasm  
Spain (CHIVI Hospital) - Minimally invasive follicular carcinoma

**Case 7 - Diagnosis:** Minimally invasive (micro-invasive) follicular carcinoma, thyroid

Case 7 - References:

[Minimally invasive follicular thyroid carcinoma : Not always total thyroidectomy]  
Chirurg 2010 Jul;81(7): p627-30, 632-5  
Hermann M; Tonninger K, et al.

Childhood minimally invasive follicular carcinoma: clinical features and immunohistochemistry analysis.  
J Paediatr Child Health 2010 Apr;46(4): p166-70  
Zou CC; Zhao ZY; Liang L

A 3-D study of capsular invasion in follicular thyroid tumors. A novel approach to an old dilemma.  
Pathologica 2010 Jun;102(3): p93-5  
Di Tommaso L; Tresoldi D; Navlignu CI; Destro A; Comi P; Morbiducci U; Roncalli M; Rizzo G

Molecular analysis of minimally invasive follicular carcinomas by gene profiling.  
Surgery 2005 Dec;138(6): p1042-8; discussion 1048-9  
Lubitz CC; Gallagher LA, et al.

Can minimally invasive follicular thyroid cancer be approached as a benign lesion?: a population-level analysis of survival among 1,200 patients.  
Ann Surg Oncol 2013 Mar;20(3): p767-72  
Goffredo P; Cheung K, et al.

**Case No. 8, Accession No. 31732**

**May 2015**

Bishop (Northern Inyo Hospital) - Hurthle cell tumor/lesion  
Camarillo, Ca (St Johns Regional) – Hurthle cell tumor  
Fontana (Kaiser Foundation Hospital) - Oncocytic follicular adenoma  
Glendale - Immature teratoma  
Lakewood – Follicular adenoma with oncocytic changes  
Livermore – Hurthle cell adenoma  
Loma Linda (LLU Residents) – Oncocytic (Hurthle Cell) adenoma  
Long Beach (Long Beach VA) – Follicular adenoma with oncocytic features cannot exclude invasion  
Oakland (ACMC) – Hurthle Cell Adenoma (6)  
Palo Alto (VA Palo Alto) – Hurthle cell adenoma  
San Francisco (San Francisco General Hospital) - Hurthle cell carcinoma  
San Francisco (UCSF) - Follicular carcinoma  
Santa Barbara (Miramonte Laboratory) - Hurthle cell carcinoma  
Woodland Hills (Kaiser Permanente) - Oncocytoma  
Arkansas, El Dorado (Associated Path Lab) – Hurthle cell adenoma  
Colorado, Fort Collins - Hurthle cell adenoma  
Delaware, Newark (AFMES) – Follicular Carcinoma  
Florida (Munroe Hospital) – Minimally invasive Hurthle cell carcinoma  
Florida (GastroEnterology Associates of Ocala) - Hurthle cell neoplasm (favor low grade)  
Georgia, Atlanta - Hurthle cell neoplasm  
Georgia (Wellstar Healthcare System) - Hurthle cell adenoma (3) / Follicular adenoma  
Illinois (Heartland Regional Medical Center) - Encapsulated well differentiated follicular neoplasm, favor follicular adenoma  
Iowa (Allen Memorial Hospital) - Oncocytic carcinoma, angioinvasive  
Kansas (Peterson Labs) – Hurthle cell neoplasm (2)  
Louisiana (LSUHC) – Hurthle cell carcinoma  
Maryland (University of Maryland Medical System) - Hurthle cell adenoma

Minnesota (Fairview Ridges Hospital) - Hurthle cell carcinoma  
Mississippi (The University of Mississippi Medical Center) - Hurthle cell neoplasm  
Nebraska (Creighton University Medical Center) - Immature teratoma  
North Carolina (Eastern Carolina Pathology) – Follicular carcinoma  
North Carolina, Clemmons – Oxyphilic follicular neoplasm (no definite invasion)  
Ohio, (Summa Health Residents) – Hurthle cell nodule  
Ohio, Toledo – Hurthle cell adenoma  
Ohio, Union Town – Follicular carcinoma  
Pennsylvania (Drexel University College of Medicine Residents) - Hurthle cell neoplasm  
Pennsylvania (Lehigh Valley Hospital) - Hurthle cell carcinoma  
Puerto Rico (University of Puerto Rico) – Widely invasive follicular carcinoma, oncocyctic variant  
South Carolina (Medical University of South Carolina) -  
Texas, Crystal Beach - Adenoma oncocyctic  
Texas, Lubbock - Oncocyctic adenoma  
Texas (Baylor Scott & White) – Hurthle cell carcinoma  
Washington (Sound Pathology Associates) – Hurthle cell carcinoma  
West Virginia (Greenbrier Valley Medical Center) - Hurthle cell tumor (Malignant ?)  
Australia (Royal Hobart Hospital) - Minimally invasive follicular carcinoma  
Australia (Royal Prince Alfred Hospital) - Immature teratoma  
Ireland (Bon Secours Hospital) – Hurthle cell adenoma  
Ireland (Kerry General Hospital) - Hurthle cell neoplasm  
Ireland (Mayo General Hospital) - Hurthle cell adenoma  
Japan (Asahi General Hospital) - Oncocyctic variant of papillary carcinoma  
Japan (Lions Mansion) – Hurthle cell tumor (follicular tumor, oncocyctic variant), thyroid  
Japan – Follicular adenoma  
Oman (Khoula Hospital) – Oncocyctic carcinoma  
Spain (CHIVI Hospital) - Oncocyctic follicular carcinoma

**Case 8 - Diagnosis:** Follicular “Hurthle cell” carcinoma, thyroid

Case 8 - References:

Does Hurthle cell carcinoma of the thyroid have a poorer prognosis than ordinary follicular thyroid carcinoma?  
 Ann Surg Oncol 2013 Sep;20(9): p2944-50  
 Sugino K; Kameyama K, et al.

Can abundant colloid exclude oncocyctic (Hurthle cell) carcinoma in thyroid fine needle aspiration? Cytohistological correlation of 127 oncocyctic (Hurthle cell) lesions.  
 Cytopathology 2013 Jun;24(3): p185-93  
 Yang GC; Schreiner AM; Sun W

Genomic dissection of Hurthle cell carcinoma reveals a unique class of thyroid malignancy.  
 J Clin Endocrinol Metab 2013 May;98(5): pE962-72  
 Ganly I; Ricarte Filho J; Eng S; Ghossein R; Morris LG; Liang Y; Socci N; Kannan K; Mo Q, et al.

Hurthle cell carcinoma: a population-level analysis of 3311 patients.  
 Cancer 2013 Feb 1;119(3): p504-11  
 Goffredo P; Roman SA; Sosa JA

Hurthle cell carcinoma: an update on survival over the last 35 years.  
 Surgery 2013 Dec;154(6): p1263-71; discussion 1271  
 Nagar S; Aschebrook-Kilfoy B, et al.

Hurthle cell carcinoma: a population-level analysis of 3311 patients.  
 Cancer 2013 Feb 1;119(3): p504-11  
 Goffredo P; Roman SA; Sosa JA

Patients with follicular and Hurthle cell microcarcinomas have compromised survival: a population level study of 22,738 patients.

Surgery 2013 Dec;154(6): p1246-53; discussion 1253-4

Kuo EJ; Roman SA; Sosa JA

**Case No. 9, Accession No. 31967**

**May 2015**

Bishop (Northern Inyo Hospital) - Medullary carcinoma with amyloid  
Camarillo, Ca (St Johns Regional) – Medullary ca  
Fontana (Kaiser Foundation Hospital) - Medullary thyroid ca  
Glendale - Benign thyroid nodule  
Lakewood – Medullary thyroid carcinoma  
Livermore – Medullary carcinoma (w/a/s)  
Loma Linda (LLU Residents) – Medullary carcinoma  
Long Beach (Long Beach VA) – Medullary carcinoma  
Oakland (ACMC) – Medullary thyroid carcinoma (6)  
Palo Alto (VA Palo Alto) – Medullary carcinoma  
San Francisco (San Francisco General Hospital) - Medullary Carcinoma  
San Francisco (UCSF) - Medullary carcinoma  
Santa Barbara (Miramonte Laboratory) - Medullary carcinoma  
Woodland Hills (Kaiser Permanente) - Medullary carcinoma with amyloid  
Arkansas, El Dorado (Associated Path Lab) – Medullary carcinoma  
Colorado, Fort Collins - Insular carcinoma  
Delaware, Newark (AFMES) – Medullary Carcinoma  
Florida (Munroe Hospital) – Medullary carcinoma  
Florida (GastroEnterology Associates of Ocala) - Medullary carcinoma  
Georgia, Atlanta - Medullary thyroid carcinoma  
Georgia (Wellstar Healthcare System) - Medullary thyroid carcinoma (4)  
Illinois (Heartland Regional Medical Center) - Medullary carcinoma  
Iowa (Allen Memorial Hospital) - Poorly differentiated thyroid carcinoma  
Kansas (Peterson Labs) – Medullary carcinoma (2)  
Louisiana (LSUHC) – Medullary carcinoma  
Maryland (University of Maryland Medical System) - Medullary carcinoma  
Minnesota (Fairview Ridges Hospital) - Medullary carcinoma of the thyroid  
Mississippi (The University of Mississippi Medical Center) - Poorly differentiated carcinoma  
Nebraska (Creighton University Medical Center) - Lithium induced multinodular goiter  
North Carolina (Eastern Carolina Pathology) – Medullary thyroid carcinoma  
North Carolina, Clemmons – Medullary thyroid carcinoma  
Ohio, (Summa Health Residents) – Medullary thyroid carcinoma  
Ohio, Toledo – Medullary thyroid carcinoma  
Ohio, Union Town – Medullary carcinoma  
Pennsylvania (Drexel University College of Medicine Residents) - Medullary carcinoma  
Pennsylvania (Lehigh Valley Hospital) - Medullary carcinoma  
Puerto Rico (University of Puerto Rico) – Medullary thyroid carcinoma  
South Carolina (Medical University of South Carolina) -  
Texas, Crystal Beach - Medullary carcinoma  
Texas, Lubbock - Medullary carcinoma  
Texas (Baylor Scott & White) – Medullary carcinoma  
Washington (Sound Pathology Associates) – Medullary Carcinoma  
West Virginia (Greenbrier Valley Medical Center) - Medullary carcinoma  
Australia (Royal Hobart Hospital) - Medullary carcinoma  
Australia (Royal Prince Alfred Hospital) - Lithium induced goiter  
Ireland (Bon Secours Hospital) – Medullary carcinoma  
Ireland (Kerry General Hospital) - Poorly differentiated /insular carcinoma  
Ireland (Mayo General Hospital) - Medullary carcinoma

Japan (Asahi General Hospital) - Medullary carcinoma  
Japan (Lions Mansion) – Medullary carcinoma, thyroid  
Japan – Follicular adenoma  
Oman (Khoula Hospital) – Medullary carcinoma  
Spain (CHIVI Hospital) - Medullary carcinoma

**Case 9 - Diagnosis:** Medullary carcinoma, thyroid

**Case 9 - References:**

Medullary thyroid carcinoma in a patient with Hashimoto's thyroiditis diagnosed by calcitonin washout from a thyroid nodule.

Diagn Cytopathol 2013 Jul;41(7): p644-6

Mousa U; Gursoy A, et al.

Current update on medullary thyroid carcinoma.

AJR Am J Roentgenol 2013 Dec;201(6): pW867-76

Ganeshan D; Paulson E, et al.

Fine needle aspiration and medullary thyroid carcinoma: the risk of inadequate preoperative evaluation and initial surgery when relying upon FNAB cytology alone.

Endocr Pract 2013 Nov-Dec;19(6): p920-7

28 listed authors ... too many to acknowledge. (Do not do this ... DRC)

Mixed medullary-follicular carcinoma of the thyroid.

Case Rep Endocrinol 2013;2013:571692

Tohidi M; Pourbehi G, et al.

Advanced medullary thyroid cancer: pathophysiology and management.

Cancer Manag Res 2013;5:57-66

Ferreira CV; Siqueira DR, et al.

***Case No. 10, Accession No. 31935***

***May 2015***

Bishop (Northern Inyo Hospital) - Anaplastic carcinoma

Camarillo, Ca (St Johns Regional) - Hodgkins of thyroid

Fontana (Kaiser Foundation Hospital) - Anaplastic thyroid ca

Glendale - Papillary carcinoma

Lakewood – Anaplastic thyroid carcinoma

Livermore – Poorly differentiated carcinoma, thyroid

Loma Linda (LLU Residents) – Anaplastic carcinoma

Long Beach (Long Beach VA) – Anaplastic carcinoma

Oakland (ACMC) – Anaplastic thyroid carcinoma (6)

Palo Alto (VA Palo Alto) – Anaplastic thyroid carcinoma

San Francisco (San Francisco General Hospital) - Anaplastic Carcinoma

San Francisco (UCSF) - Follicular dendritic cell tumor

Santa Barbara (Miramonte Laboratory) - Anaplastic carcinoma

Woodland Hills (Kaiser Permanente) - Undifferentiated (Anaplastic) Carcinoma vs diffuse large B-cell lymphoma

Arkansas, El Dorado (Associated Path Lab) – Undifferentiated carcinoma

Colorado, Fort Collins - Medullary carcinoma

Connecticut (Danbury Hospital) - Choriocarcinoma

Delaware, Newark (AFMES) – Anaplastic Carcinoma

Florida (Munroe Hospital) – Undifferentiated carcinoma

Florida (GastroEnterology Associates of Ocala) - Poorly differentiated carcinoma (v sarcoma/lymphoma with immunostains)

Georgia, Atlanta - Anaplastic carcinoma; rule out lymphoma



Georgia (Wellstar Healthcare System) - Anaplastic thyroid carcinoma / PD Malignancy: Anaplastic carcinoma ect. / r/o melanoma, anaplastic carcinoma / Anaplastic Carcinoma

Illinois (Heartland Regional Medical Center) - Undifferentiated (anaplastic) carcinoma

Iowa (Allen Memorial Hospital) - Anaplastic thyroid carcinoma

Kansas (Peterson Labs) – Anaplastic carcinoma (2)

Louisiana (LSUHC) – Anaplastic carcinoma

Maryland (University of Maryland Medical System) - Anaplastic thyroid carcinoma

Minnesota (Fairview Ridges Hospital) - Anaplastic carcinoma

Mississippi (The University of Mississippi Medical Center) - Undifferentiated carcinoma

Nebraska (Creighton University Medical Center) - Papillary thyroid carcinoma

North Carolina (Eastern Carolina Pathology) – Anaplastic thyroid carcinoma

North Carolina, Clemmons – Anaplastic thyroid carcinoma

Ohio, (Summa Health Residents) – Anaplastic thyroid carcinoma

Ohio, Toledo – Anaplastic Carcinoma

Ohio, Union Town – Anaplastic carcinoma

Pennsylvania (Drexel University College of Medicine Residents) - Anaplastic carcinoma

Pennsylvania (Lehigh Valley Hospital) - Undifferentiated carcinoma

Puerto Rico (University of Puerto Rico) – Anaplastic thyroid carcinoma r/o pleomorphic lymphoma

Texas, Crystal Beach - Carcinoma poorly differentiated probably metastatic

Texas, Lubbock - Hodgkin lymphoma

Texas (Baylor Scott & White) – Anaplastic carcinoma

Washington (Sound Pathology Associates) – Anaplastic Carcinoma

West Virginia (Greenbrier Valley Medical Center) - Anaplastic Carcinoma

Australia (Royal Hobart Hospital) - Anaplastic carcinoma thyroid

Australia (Royal Prince Alfred Hospital) - Papillary carcinoma

Ireland (Bon Secours Hospital) – Undifferentiated (anaplastic) carcinoma

Ireland (Kerry General Hospital) - Undifferentiated neoplasm consistent with anaplastic ca

Ireland (Mayo General Hospital) - Anaplastic carcinoma vs High grade lymphoma

Japan (Asahi General Hospital) - Undifferentiated carcinoma

Japan (Lions Mansion) – Undifferentiated (anaplastic) carcinoma, thyroid

Japan – Follicular carcinoma

Oman (Khoula Hospital) – Anaplastic carcinoma

Spain (CHIVI Hospital) - Anaplastic Carcinoma

**Case 10 - Diagnosis:** Undifferentiated (anaplastic) carcinoma, thyroid

**Case 10 - References:**

Anaplastic thyroid cancer.

Oral Oncol 2013 Jul;49(7): p702-6

O'Neill JP; Shaha AR

New targeted therapies and other advances in the management of anaplastic thyroid cancer.

Curr Opin Oncol 2013 Jan;25(1): p44-9

Deshpande HA; Roman S; Sosa JA

Undifferentiated (anaplastic) thyroid carcinoma and iodine intake in Salta, Argentina.

Endocr Pathol 2013 Sep;24(3): p125-31

Harach HR; Galindez M, et al.

Sites of metastases of anaplastic thyroid carcinoma: autopsy findings in 45 cases from a single institution.

Thyroid 2013 Jun;23(6): p709-13

Besic N; Gazic B

PAX8 is expressed in anaplastic thyroid carcinoma diagnosed by fine-needle aspiration: a study of three cases with histological correlates.

Eur J Endocrinol 2013 Sep;169(3): p307-11  
Bellevicine C; Iaccarino A, et al.

Insular thyroid carcinoma: a retrospective clinicopathologic study.  
Am J Otolaryngol 2013 Jul-Aug;34(4): p292-5  
Hod R; Bachar G, et al.