

**California Tumor Tissue Registry's
Subscription "C" - Vol 3(1)
September, 2009**

***"Thyroid Pathology part 2"*
(see also *Thyroid Pathology, Vol 2(1), September, 2008*)**

Case 1

This is a thyroid gland from a 27 y/o woman with diffuse goiter and clinical signs of hyperthyroidism. She had had a short treatment with I-131 before surgery.

Dx: Graves Disease, treated

Claremont - Hashimoto's
Santa Rosa (Santa Rosa Memorial Hospital) - Graves disease (3)
Woodland Hills (Kaiser Permanente) - Diffuse hyperplasia/Graves disease
Alabama, Birmingham - Graves disease
Alabama (Norwood Clinic) - Graves disease
Arizona (Integrated Pathology) - Treated Graves disease
Arkansas (The Laboratory of Pathology) - Graves disease
Georgia, Atlanta - Changes consistent with hyperplastic nodule (Graves disease)
Kansas (Peterson Laboratory Services) - Follicular variant of papillary carcinoma
Maryland, Baltimore - Treated Graves disease
Maryland (University of Maryland Medical Center) - Diffuse hyperplasia with treatment effect
Massachusetts, Peabody - Hyperplasia, post radiation rx
Massachusetts (Rhode Island Hospital) - Treated Graves disease
Michigan (Oakwood Hospital) - Graves disease
Ohio, Columbus - Thyroid, benign thyroid
Texas, Victoria - Graves disease
Washington, Bothell - Graves
The Netherlands, Amstelveen - Benign treated Graves disease

Thyroidectomy remains an effective treatment option for Graves' disease.
Weber KJ; Solorzano CC; Lee JK; Gaffud MJ; Prinz RA. Am J Surg 191(3): p400-5, 2006.

A prospective study of the effects of radioiodine therapy for hyperthyroidism in patients with minimally active graves' ophthalmopathy. Perros P; Kendall-Taylor P; Neoh C; Frewin S; Dickinson J. J Clin Endocrinol Metab 90(9): p5321-3, 2005.

A 36-year retrospective analysis of the efficacy and safety of radioactive iodine in treating young Graves' patients. Comment In: J Clin Endocrinol Metab. 89(9):4227-8, 2004. J Clin Endocrinol Metab. Read CH; Tansey MJ; Menda Y. 89(9): p4229-33, 2004.

Radioiodine treatment of Graves' hyperthyroidism. Horacek J; Franklyn JA. J Clin Endocrinol Metab 88(12): p6113, 2003. Comment: J Clin Endocrinol Metab. 88(3):978-83, 2003.

Thyroid cell proliferation in Graves' disease. Use of MIB-1 monoclonal antibody Mazeto GM; Oliveira ML; Padovani CR; Montenegro MR; Aragon FF; Schmitt FC. Acta Cytol 48(1): p57-63, 2004.

Case 2

A 72 y/o man having been treated with I-131 developed a 3.5 cm mass in the thyroid gland.

Dx: Follicular adenoma, thyroid

Claremont - Follicular adenoma

Santa Rosa (Santa Rosa Memorial Hospital) - Thyroid nodular hyperplasia (3)

Woodland Hills (Kaiser Permanente) - Follicular adenoma

Alabama, Birmingham - Follicular adenoma

Alabama (Norwood Clinic) - Follicular adenoma

Arizona (Integrated Pathology) - Follicular adenoma

Arkansas (The Laboratory of Pathology) - Follicular adenoma

Georgia, Atlanta - Follicular adenoma

Kansas (Peterson Laboratory Services) - Follicular adenoma

Maryland, Baltimore - Follicular adenoma

Maryland (University of Maryland Medical Center) - Follicular adenoma

Massachusetts, Peabody - Follicular adenoma, post radiation rx

Massachusetts (Rhode Island Hospital) - Follicular adenoma

Michigan (Oakwood Hospital) - Follicular adenoma

Ohio, Columbus - Thyroid, adenoma

Texas, Victoria - Benign nodular thyroid

Washington, Bothell - Follicular adenoma

The Netherlands, Amstelveen - Benign follicular adenoma

Prevalence and incidence of cytoplasmic yellow bodies in thyroid neoplasms. Rothenberg HJ; Goellner JR; Carney JA. Arch Pathol Lab Med 127(6): p715-7, 2003.

Class distinction between follicular adenomas and follicular carcinomas of the thyroid gland on the basis of their signature expression. Stolf BS; Santos MM; Simao DF; Diaz JP; Cristo EB; Hirata R; Curado MP; Neves EJ; Kowalski LP; Carvalho AF. Cancer 106(9): p1891-900, 2006.

Can cytology accurately predict benign follicular nodules? Smith J; Cheifetz RE; Schneidereit N; Berean K; Thomson T. Am J Surg 189(5): p592-5; discussion p595, 2005.

Follicular neoplasms of the thyroid: view, biases, and experiences. Li Volsi VA; Baloch ZW. Adv Anat Pathol 11(6): p279-87, 2004.

Does Hurthle cell lesion/neoplasm predict malignancy more than follicular lesion/neoplasm on thyroid fine-needle aspiration? Pu RT; Yang J; Wasserman PG; Bhuiya T; Griffith KA; Michael CW. Diagn Cytopathol 34(5): p330-4, 2006.

Case 3

This 12 y/o girl had an encapsulated thyroid nodule. Seen by Dr. Juan Rosai.

Dx: Minimally invasive follicular carcinoma, thyroid

Claremont - Follicular carcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Thyroid follicular carcinoma (3)
Woodland Hills (Kaiser Permanente) - Follicular carcinoma
Alabama, Birmingham - Follicular carcinoma, minimally invasive
Alabama (Norwood Clinic) - Follicular carcinoma
Arizona (Integrated Pathology) - Minimally invasive follicular carcinoma
Arkansas (The Laboratory of Pathology) - Follicular carcinoma
Georgia, Atlanta - Follicular carcinoma, minimally invasive
Kansas (Peterson Laboratory Services) - Follicular carcinoma
Maryland, Baltimore - Follicular carcinoma
Maryland (University of Maryland Medical Center) - Minimally invasive follicular carcinoma
Massachusetts, Peabody - Follicular carcinoma
Massachusetts (Rhode Island Hospital) - Minimally invasive follicular carcinoma
Michigan (Oakwood Hospital) - Minimally invasive follicular carcinoma
Ohio, Columbus - Thyroid, follicular carcinoma minimally invasive
Texas, Victoria - Follicular carcinoma with focal invasion
Washington, Bothell - Follicular carcinoma
The Netherlands, Amstelveen - Minimally invasive follicular carcinoma

Molecular analysis of minimally invasive follicular carcinomas by gene profiling. Lubitz CC; Gallagher LA; Finley DJ; Zhu B; Fahey TJ. Surgery 138(6): p1042-8; discussion 1048-9, 2005.

Interobserver and intraobserver reproducibility in the histopathology of follicular thyroid carcinoma. Franc B; de la Salmoniere P; Lange F; Hoang C; Louvel A; de Roquancourt A; Vilde F; Hejblum G; Chevret S; Chastang C. Hum Pathol (11):1081-2, 2003.

Follicular thyroid carcinoma: histology and prognosis. D'Avanzo A; Treseler P; Ituarte PH; Wong M; Streja L; Greenspan FS; Siperstein AE; Duh QY; Clark OH. Cancer 100(6): p1123-9, 2004.

Cell proliferation marker MCM2, but not Ki67, is helpful for distinguishing between minimally invasive follicular carcinoma and follicular adenoma of the thyroid. Mar KC; Eimoto T; Nagaya S; Tateyama H. Histopathology 48(7): p801-7, 2006.

Minimally invasive follicular thyroid carcinoma: completion thyroidectomy or not? L; Parkyn R; Philips J; Barraclough B; Robinson B. ANZ J Surg 72(11): p844-5, 2002.

Case 4

This tissue is from a 7 cm nodule in the left thyroid lobe of 40 y/o woman. It had a bulging cut surface.

Dx: Minimally invasive follicular carcinoma, thyroid

Claremont - Papillary thyroid carcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Thyroid follicular carcinoma (3)
Woodland Hills (Kaiser Permanente) - Follicular carcinoma
Alabama, Birmingham - Hurthle cell carcinoma, minimally invasive
Alabama (Norwood Clinic) - Hurthle cell carcinoma

Arizona (Integrated Pathology) - Minimally invasive follicular carcinoma
Arkansas (The Laboratory of Pathology) - Follicular carcinoma with lymph node metastasis
Georgia, Atlanta - Papillary thyroid carcinoma, follicular variant
Kansas (Peterson Laboratory Services) - Oncocytic nodules in Hashimoto's thyroiditis
Maryland, Baltimore - Follicular carcinoma, background Hashimoto's
Maryland (University of Maryland Medical Center) - Follicular variant of papillary carcinoma
Massachusetts, Peabody - Hashimoto's thyroiditis, follicular carcinoma
Massachusetts (Rhode Island Hospital) - Minimally invasive follicular carcinoma
Michigan (Oakwood Hospital) - Follicular carcinoma
Ohio, Columbus - Thyroid, left lobe, follicular carcinoma minimally invasive
Texas, Victoria - Atypical nodule with ? invasion
Washington, Bothell - Hashimoto's thyroiditis
The Netherlands, Amstelveen - Oncocytic follicular adenoma

Results of the treatment of locally invasive thyroid carcinoma. Kowalski LP; Filho JG. Head Neck 24(4): p340-4, 2002.

Should cytopathologists stop reporting follicular neoplasms on fine-needle aspiration of the thyroid? Yang GC; Liebeskind D; Messina AV. Cancer 99(2): p69-74, 2003.

Follicular thyroid carcinoma: the role of histology and staging systems in predicting survival. Lo CY; Chan WF; Lam KY; Wan KY. Ann Surg 242(5): p708-15, 2005.

Follicular thyroid lesions, elements that affect both diagnosis and prognosis. Zeiger MA; Dackiw AP. J Surg Oncol 89(3): p108-13, 2005.

Case 5

This tissue is from the thyroid of an adult male with multiple thyroid and neck masses.

Dx: Papillary carcinoma, thyroid

Claremont - Papillary thyroid carcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Papillary microcarcinoma, follicular variant (3)
Woodland Hills (Kaiser Permanente) - Papillary carcinoma, metastatic to lymph node
Alabama, Birmingham - Papillary carcinoma with lymph node metastasis
Alabama (Norwood Clinic) - Papillary carcinoma with lymph node metastasis
Arizona (Integrated Pathology) - Papillary carcinoma
Arkansas (The Laboratory of Pathology) - Papillary carcinoma, follicular variant with lymph node metastasis
Georgia, Atlanta - Papillary thyroid microcarcinoma with lymph node metastases
Kansas (Peterson Laboratory Services) - Microcarcinoma with lymph node metastasis
Maryland, Baltimore - Papillary carcinoma, follicular variant, metastatic to nodes
Maryland (University of Maryland Medical Center) - Papillary carcinoma with metastasis
Massachusetts, Peabody - Micropapillary carcinoma
Massachusetts (Rhode Island Hospital) - Papillary carcinoma
Michigan (Oakwood Hospital) - Papillary carcinoma
Ohio, Columbus - Thyroid, papillary carcinoma, lymph node, metastatic papillary carcinoma
Texas, Victoria - Papillary carcinoma, follicular variant
Washington, Bothell - Follicular variant PTC
The Netherlands, Amstelveen - Follicular variant papillary thyroid carcinoma and lymph node metastasis

Fine needle aspiration cytology of follicular variant of papillary carcinoma of the thyroid: Morphologic pointers to its diagnosis. Aron M; Mallik A; Verma K. Acta Cytol 50(6): p663-8, 2006.

Diagnostic usefulness of HBME1, galectin-3, CK19, and CITED1 and evaluation of their expression in encapsulated lesions with questionable features of papillary thyroid carcinoma. Scognamiglio T; Hyjek E; Kao J; Chen YT. Am J Clin Pathol 126(5): p700-8, 2006.

Clinical and histological characteristics of papillary thyroid microcarcinoma: results of a retrospective study in 243 patients. Roti E; Rossi R; Trasforini G; Bertelli F; Ambrosio MR; Busutti L; Pearce EN; Braverman LE; Degli Uberti EC. Comment In: Clin Endocrinol Metab. 1(6):2043-6 2006. J Clin Endocrinol Metab (6): p2171-8, 2006.

Needle tract implantation of papillary thyroid carcinoma after fine-needle aspiration biopsy. Ito Y; Tomoda C; Uruno T; Takamura Y; Miya A; Kobayashi K; Matsuzuka F; Kuma K; Miyauchi A. World J Surg 29(12): p1544-9, 2005.

Case 6

This is a thyroid nodule from a 36 y/o woman.

Dx: Papillary carcinoma, tall cell variant, thyroid

Claremont - Columnar cell carcinoma

Santa Rosa (Santa Rosa Memorial Hospital) - Papillary carcinoma, diffuse sclerosing variant (3)

Woodland Hills (Kaiser Permanente) - Papillary carcinoma

Alabama, Birmingham - Papillary carcinoma arising in lymphocytic thyroiditis

Alabama (Norwood Clinic) - Papillary carcinoma arising in Hashimoto's

Arizona (Integrated Pathology) - Papillary carcinoma, tall cell variant

Arkansas (The Laboratory of Pathology) - Papillary carcinoma, tall cell variant

Georgia, Atlanta - Papillary thyroid carcinoma, tall cell variant

Kansas (Peterson Laboratory Services) - Papillary carcinoma, tall cell variant

Maryland, Baltimore - Papillary carcinoma, tall cell variant

Maryland (University of Maryland Medical Center) - Papillary carcinoma

Massachusetts, Peabody - Chronic thyroiditis

Massachusetts (Rhode Island Hospital) - Papillary carcinoma, tall cell variant

Michigan (Oakwood Hospital) - Papillary carcinoma

Ohio, Columbus - Thyroid, papillary carcinoma

Texas, Victoria - Papillary carcinoma

Washington, Bothell - Tall cell variant PTC

The Netherlands, Amstelveen - Papillary thyroid carcinoma (sclerosing variant)

Breast tumor resembling the tall cell variant of papillary thyroid carcinoma: report of 5 cases. Eusebi V; Damiani S; Ellis IO; Azzopardi JG; Rosai J. Am J Surg Pathol 27(8): p1114-8, 2003.

Tall cell variant of papillary carcinoma arising from a thyroglossal cyst: report of a case with diagnosis by fine needle aspiration cytology. Koybasioglu F; Simsek GG; Onal BU. Acta Cytol 50(2): p221-4, 2006.

Columnar cell variant of papillary thyroid carcinoma. Report of a case with cytologic findings. Ylagan LR; Dehner LP; Huettner PC; Lu D. Acta Cytol 48(1): p73-7, 2004.

Distinguishing tall cell variant of papillary thyroid carcinoma from usual variant of papillary thyroid carcinoma in cytologic specimens. Solomon A; Gupta PK; Li Volsi VA; Baloch ZW. Diagn Cytopathol 27(3): p143-8, 2002.

Papillary thyroid carcinoma and its variants in fine needle aspiration smears. A cytomorphologic study with special reference to tall cell variant. Das DK; Mallik MK; Sharma P; Sheikh ZA; Mathew PA; Sheikh M; Mirza K; Madda JP; Francis IM; Junaaid TA. Acta Cytol 48(3): p325-36, 2004.

Case 7

A 35 y/o male had a one yr hx of a right neck mass. He sustained a 35 lb wt loss associated with anorexia, diarrhea, abdominal distention and lumbosacral pain. Two weeks prior to admission he noticed the mass to have become bigger and he became hoarse. His father had a papillary thyroid carcinoma removed at age 62. Exam showed right vocal cord paralysis, multiple neck masses, a laryngeal nodule in the false cord, and multiple 2 mm masses in the tongue. The laryngeal nodule was biopsied and found to be a submucosal neuroma.

Dx: Medullary carcinoma, thyroid

Claremont - Poorly differentiated thyroid carcinoma

Santa Rosa (Santa Rosa Memorial Hospital) - Medullary carcinoma in M.E. N. IIB (Gorlin's syndrome)/Medullary carcinoma (2)

Woodland Hills (Kaiser Permanente) - Poorly differentiated thyroid carcinoma

Alabama, Birmingham - Medullary thyroid carcinoma

Alabama (Norwood Clinic) - Medullary carcinoma

Arizona (Integrated Pathology) - Medullary carcinoma

Arkansas (The Laboratory of Pathology) - Medullary carcinoma

Georgia, Atlanta - Poorly differentiated carcinoma vs. melanoma

Kansas (Peterson Laboratory Services) - Medullary carcinoma, small cell variant

Maryland, Baltimore - Medullary carcinoma

Maryland (University of Maryland Medical Center) - Medullary thyroid carcinoma

Massachusetts, Peabody - Medullary carcinoma, MENS2A ganglioneuroma

Massachusetts (Rhode Island Hospital) - Medullary carcinoma

Michigan (Oakwood Hospital) - Insular carcinoma

Ohio, Columbus - Thyroid, medullary carcinoma

Texas, Victoria - Medullary carcinoma

Washington, Bothell - Poorly differentiated carcinoma vs. medullary

The Netherlands, Amstelveen - Poorly differentiated carcinoma

Medullary thyroid carcinoma: including MEN 2A and MEN 2B syndromes. Quayle FJ; Moley JF. J Surg Oncol 89(3): p122-9, 2005.

Familial medullary thyroid cancer: clinical aspects and prognosis. Hyer SL; Newbold K; Harmer C. Eur J Surg Oncol 31(4): p415-9, 2005.

Concurrent papillary and medullary thyroid carcinoma. Nicolas MM; Neto AG; Luna MA. Arch Pathol Lab Med 29(2): p264-5, 2005.

Unraveling the amyloid associated with human medullary thyroid carcinoma. Khurana R; Agarwal A; Bajpai VK; Verma N; Sharma AK; Gupta RP; Madhusudan KP. Endocrinology 145(12): p5465-70, 2004.

The pathology of preclinical medullary thyroid carcinoma. Ashworth M. Endocr Pathol 15(3): p227-31, 2004.

Case 8

A 65 y/o woman had this cold nodule in the thyroid.

Dx: Medullary carcinoma, thyroid (note differences from case 7)

Claremont - Medullary carcinoma

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

Woodland Hills (Kaiser Permanente) - Medullary carcinoma

Alabama, Birmingham - Medullary thyroid carcinoma

Alabama (Norwood Clinic) - Medullary carcinoma

Arizona (Integrated Pathology) - Medullary carcinoma

Arkansas (The Laboratory of Pathology) - Medullary carcinoma

Georgia, Atlanta - Medullary thyroid carcinoma

Kansas (Peterson Laboratory Services) - Medullary carcinoma

Maryland, Baltimore - Medullary carcinoma

Maryland (University of Maryland Medical Center) - Medullary thyroid carcinoma

Massachusetts, Peabody - Medullary carcinoma

Massachusetts (Rhode Island Hospital) - Medullary carcinoma

Michigan (Oakwood Hospital) - Medullary carcinoma

Ohio, Columbus - Thyroid, medullary carcinoma

Texas, Victoria - Medullary carcinoma

Washington, Bothell - Medullary carcinoma

The Netherlands, Amstelveen - Medullary carcinoma

Primary spindle cell lesions of the thyroid gland; an overview. Papi G; Corrado S; Li Volsi VA. Am J Clin Pathol 125 Suppl:S95-123, 2006.

Increased calcitonin level in thyroid nodules without medullary carcinoma. Gibelin H; Essique D; Jones C; Levillain P; Marechaud R; Kraimps JL. Br J Surg 92(5): p574-8, 2005.

Prognostic factors for sporadic medullary thyroid carcinoma. Gulben K; Berberoglu U; Boyabatli M. World J Surg 30(1): p84-90, 2006.

Prediction of mediastinal lymph node metastasis in medullary thyroid carcinoma. Machens A; Holzhausen HJ; Dralle H. Br J Surg 91(6): p709-12, 2004.

Molecular genotyping of medullary thyroid carcinoma can predict tumor recurrence. Sheikh HA; Tometsko M; Niehouse L; Aldeeb D; Swalsky P; Finkelstein S; Barnes EL; Hunt JL. Am J Surg Pathol 28(1): p101-6, 2004.

Medullary and papillary tumors are frequently associated in the same thyroid gland without evidence of reciprocal influence in their biologic behavior. Biscolla RP; Ugolini C; Sculli M; Bottici V; Castagna MG; Romei C; Cosci B;

Molinaro E; Faviana P; Basolo F; Miccoli P; Pacini F; Pinchera A; Elisei R. Thyroid 14(11): p946-52, 2004.

Case 9

A 79 y/o man had this rapidly growing mass in his thyroid gland.

Dx: Anaplastic carcinoma, thyroid

Claremont - Anaplastic carcinoma

Santa Rosa (Santa Rosa Memorial Hospital) - Undifferentiated (anaplastic) carcinoma/anaplastic carcinoma

Woodland Hills (Kaiser Permanente) - Undifferentiated carcinoma

Alabama, Birmingham - Anaplastic carcinoma

Alabama (Norwood Clinic) - Reidel's thyroiditis

Arizona (Integrated Pathology) - Anaplastic carcinoma

Arkansas (The Laboratory of Pathology) - Anaplastic carcinoma

Georgia, Atlanta - Anaplastic thyroid carcinoma

Kansas (Peterson Laboratory Services) - Undifferentiated carcinoma

Maryland, Baltimore - Anaplastic carcinoma, rule out metastasis

Maryland (University of Maryland Medical Center) - Anaplastic carcinoma

Massachusetts, Peabody - Anaplastic carcinoma

Massachusetts (Rhode Island Hospital) - Anaplastic carcinoma

Michigan (Oakwood Hospital) - Anaplastic carcinoma

Ohio, Columbus - Thyroid, carcinoma, high grade

Texas, Victoria - Undifferentiated carcinoma

Washington, Bothell - Anaplastic carcinoma

The Netherlands, Amstelveen - Anaplastic carcinoma

Coexistent anaplastic and differentiated thyroid carcinoma: an immunohistochemical study. Aratake Y; Nomura H; Kotani T; Marutsuka K; Kobayashi K; Kuma K; Miyauchi A; Okayama A; Tamura K. Am J Clin Pathol 125(3): p399-406, 2006.

Metastatic anaplastic carcinoma of the thyroid mimicking squamous cell carcinoma: report of a case of a challenging cytologic diagnosis. Oktay MH; Smolkin MB; Williams M; Cajigas A. Acta Cytol 50(2): p201-4, 2006.

Rhabdoid tumor of the thyroid gland: a variant of anaplastic carcinoma. Lai ML; Faa G; Serra S; Senes G; Daniele GM; Boi F; Mariotti S; Beauchemin M; Asa SL. Arch Pathol Lab Med 129(3): pp55-7, 2005.

The coexistence of anaplastic and papillary carcinomas of the thyroid: a case presentation and literature review. Fortson JK; Durden FL; Patel V; Darkeh A. Am Surg 70(12): p1116-9, 2004.

Poorly differentiated carcinomas of the thyroid with trabecular, insular, and solid patterns: a clinicopathologic study of 183 patients. Volante M; Landolfi S; Chiusa L; Palestini N; Motta M; Codegone A; Torchio B; Papotti MG. Cancer 100(5): p950-7, 2004.

Case 10

This is a thyroid mass from a 78 y/o man.

Dx: Large cell lymphoma (nos) and Hashimotos thyroiditis, thyroid

Claremont - DLBCL in Hashimoto's

Santa Rosa (Santa Rosa Memorial Hospital) - Diffuse large cell lymphoma in background of autoimmune (Hashimoto's) thyroiditis/Diffuse large cell lymphoma

Woodland Hills (Kaiser Permanente) - Diffuse large B-cell carcinoma

Alabama, Birmingham - Large cell lymphoma arising in background of Hashimotos thyroiditis

Alabama (Norwood Clinic) - Large cell lymphoma

Arizona (Integrated Pathology) - Large cell lymphoma associated with Hashimotos thyroiditis

Arkansas (The Laboratory of Pathology) - Lymphoma

Georgia, Atlanta - Diffuse large B-cell lymphoma arising in background of lymphocytic thyroiditis

Kansas (Peterson Laboratory Services) - Diffuse large cell lymphoma

Maryland, Baltimore - Large cell lymphoma vs. myeloid sarcoma, background Hashimoto's

Maryland (University of Maryland Medical Center) - Primary thyroid lymphoma

Massachusetts, Peabody - Lymphocytic lymphoma

Massachusetts (Rhode Island Hospital) - Large cell lymphoma and Hashimoto's thyroiditis

Michigan (Oakwood Hospital) - Malignant, favor diffuse large cell lymphoma

Ohio, Columbus - Thyroid, large cell lymphoma, Hashimoto's thyroiditis

Texas, Victoria - Large cell lymphoma, (r/o undifferentiated carcinoma)

Washington, Bothell - Anaplastic carcinoma with adjacent Hashimotos

The Netherlands, Amstelveen - Non Hodgkin lymphoma

Malignant T-cell lymphoma of the thyroid gland associated with Hashimoto's thyroiditis. Motoi N; Ozawa Y. Pathol Int 55(7): p425-30, 2005.

Thyroid lymphoma arising from Hashimoto's thyroiditis. Miller BS; Gauger PG. J Clin Endocrinol Metab 91(10): p3711-2, 2006.

Comparative findings of lymphocytic thyroiditis and thyroid lymphoma. Lerma E; Arguelles R; Rigla M; Otal C; Cubero JM; Bague S; Carreras AM; Eulalia E; Gonzalez-Campora R; Galera H; Prat J. Acta Cytol 47(4): p575-80, 2003.

Primary thyroid lymphoma is a heterogeneous disease. Thieblemont C; Mayer A; Dumontet C; Barbier Y; Callet-Bauchu E; Felman P; Berger F; Ducottet X; Martin C; Salles G; Orgiazzi J; Coiffier B. J Clin Endocrinol Metab 87(1): p105-11, 2002.

Bonus 11

A 45 y/o female had this nodule in her thyroid gland.

Dx: Medullary carcinoma and Hashimotos Thyroiditis

Santa Rosa (Santa Rosa Memorial Hospital) - Paraganglioma versus medullary carcinoma/intrathyroid paraganglioma
The Netherlands, Amstelveen - Medullary carcinoma

[Carcinome de la thyroïde et thyroïdite de Hashimoto.] Thyroid carcinoma and Hashimoto thyroiditis Intidhar Labidi S; Chaabouni AM; Kraiem T; Attia N; Gritli S; El May A; Ben Slimane F.- Ann Otolaryngol Chir Cervicofac 123(4): p175-8, 2006.

Detection and molecular characterisation of thyroid cancer precursor lesions in a specific subset of Hashimoto's thyroiditis. Gasbarri A; Sciacchitano S;

Marasco A; Papotti M; Di Napoli A; Marzullo A; Yushkov P; Ruco L; Bartolazzi A. Br J Cancer 13;91(6): p1096-104, 2004.

A novel tumor marker, Niban, is expressed in subsets of thyroid tumors and Hashimoto's thyroiditis. Matsumoto F; Fujii H; Abe M; Kajino K; Kobayashi T; Matsumoto T; Ikeda K; Hino O. Hum Pathol 37(12): p1592-600, 2006.

Follicular thyroid lesions coexisting with Hashimoto's thyroiditis: incidence and possible sources of diagnostic errors. Kollur SM; El Sayed S; El Hag IA. Diagn Cytopathol 28(1): p35-8, 2003.