



A NEGATIVE PET SCAN EXCLUDES THE DIAGNOSIS OF CANCER IN THYROID NODULES >15 MM DIAMETER2

Vriens D, de Wilt JH, van der Wilt GJ, Netea-Maier RT, Oyen WJ, de Geus-Oei LF. **The role of [(18) F]-2-fluoro-2-deoxy-d-glucose-positron emission tomography in thyroid nodules with indeterminate fine-needle aspiration biopsy: Systematic review and meta-analysis of the literature.** Cancer. March 22, 2011. [Epub ahead of print]. doi: 10.1002/cncr.26085.

RISK OF PERSISTENT DIFFERENTIATED THYROID CANCER DESPITE NEGATIVE THYROGLOBULIN AND THYROGLOBULIN ANTIBODIES PERFORMED ON SOME COMMERCIAL TESTS4

Spencer C, Petrovic I, Fatemi S. **Current thyroglobulin autoantibody (TgAb) assays often fail to detect interfering TgAb that can result in the reporting of falsely low/undetectable serum Tg IMA values for patients with differentiated thyroid cancer.** J Clin Endocrinol Metab. February 16, 2011 [Epub ahead of print] doi:10.1210/jc.2010-2762.

FALSE POSITIVE AND FALSE NEGATIVE RESULTS OF THYROID CYTOPATHOLOGY REMAIN A CHALLENGE.6

Wang CC, Friedman L, Kennedy GC, Wang H, Kebebew E, Steward DL, Zeiger MA, Westra WH, Wang Y, Khanafshar E, Fellegara G, Rosa J, Livolsi V, Layman RB. **A large multicenter correlation study of thyroid nodule cytopathology and histopathology.** Thyroid 2011;21:243-51. Epub December 29, 2010.

BONE METASTASES OF THYROID TUMORS SHOULD BE TREATED WITH BISPHTHONATES8

Orita Y, Sugitani I, Toda K, Manabe J, Fujimoto Y. **Zoledronic acid in the treatment of bone metastases from differentiated thyroid carcinoma.** Thyroid 2011;21:31-5. Epub November 8, 2010.

DOES PLACENTAL IODINE STORAGE COMPENSATE FOR LOW MATERNAL IODINE INTAKE?10

Burns R, Azizi F, Hedayati M, Miamian P, O'Herlihy C, Smyth PPA. **Is placental iodine content related to**

dietary iodine intake? Clin Endocrinol 2011. doi 0.1111/j.1365-2265.2011.04039.x.

THE PREDICTION FOR MALIGNANCY OF THE CYTOLOGIC DIAGNOSIS "SUSPICIOUS FOR HÜRTHLE-CELL NEOPLASM" IS LOW IN PATIENTS WITH HASHIMOTO'S DISEASE 12

Roh MH, Jo VY, Stelow EB, Faquin WC, Zou KH, Alexander EK, Larsen PR, Marqusee E, Benson CB, Frates MC, Gawande A, Moore FD Jr, Ciba ED. **The predictive value of the fine-needle aspiration diagnosis "suspicious for a follicular neoplasm, hurthle cell type" in patients with hashimoto thyroiditis.** Am J Clin Pathol 2011;135:139-45.

HIGH DOSES OF SOY PHYTOESTROGEN ARE A RISK FACTOR IN THE PROGRESSION OF SUBCLINICAL TO CLINICAL HYPOTHYROIDISM. 14

Sathyapalan T, Manuchehri AM, Thatcher NJ, Rigby AS, Chapman T, Kilpatrick ES, Atkin SL. **The effect of soy phytoestrogen supplementation on thyroid status and cardiovascular risk markers in patients with subclinical hypothyroidism: a randomized, double-blind, crossover study.** J Clin Endocrinol Metab. February 16, 2011 [Epub ahead of print].

HOW DO YOU DECIDE WHAT DOSE OF THYROXINE IS APPROPRIATE FOR A PATIENT WITH SECONDARY HYPOTHYROIDISM? 17

Koulouri O, Auldin MA, Agarwal R, Kieffer V, Robertson C, Smith JF, Levy MJ, Howlett TA. **Diagnosis and treatment of hypothyroidism in TSH deficiency compared to primary thyroid disease: pituitary patients are at risk of under-replacement with levothyroxine.** Clin Endocrinol. 2011 [Epub ahead of print]. doi: 10.1111/j.1365-2265.2011.03984.x.

LOW FREE T₄ LEVELS DURING PREGNANCY ARE A RED FLAG THAT NEEDS ATTENTION. . 19

Ramos HE, Morandini M, Carre A, Tron E, Floch C, Mandelbrot L, Neri N, De Sarcus B, Simon A, Bonnefont JP, Amiel J, Desguerre I, Valayannopoulos V, Castanet M, Polak M. **Pregnancy in women heterozygous for MCT8 mutations: risk of maternal hypothyroxinemia and fetal care.** Eur J Endocrinol 2011;164:309-14. Epub November 23, 2010.

of malignancy going from atypia to suspicious for carcinoma, the authors lost the benefit of the Bethesda classification. This is shown in the results of the meta-review: a relatively low incidence of malignancy in the atypia category (16%) and a high incidence in the category suspicious for malignancy (62%). These figures must be tempered by the realization that the managing clinician probably used other factors, such as size, appearance on the ultrasound, family history, patient's concern, etc. in the decision as to whether to send a patient for surgical removal of the nodule. This is emphasized by the fact that 11% to 12% of the benign cytology category resulted in diagnoses of malignant lesions at surgical pathological review, although a few were microcarcinomas.

When the clinical factors as noted above do not suggest malignancy, I generally do not recommend surgery for the atypia category because I believe that the

likelihood of malignancy does not justify the potential complications of surgery. It should be noted that the authors used the indeterminate FNA classification as a positive diagnosis of cancer in their calculations of predictive values. Of course this increases the false positive percentage.

There is a need for improvement in the diagnosis of thyroid cancer, and molecular markers may provide the progress that is needed in this area. However, these biomarkers for malignancy or benignity are unlikely to entirely replace clinical judgment. In addition, the use of FNA biomarkers depends on obtaining an appropriate sample. And of course, at present there would be a substantial financial cost for molecular markers that examine a large number of genes.

Jerome M. Hershman, MD

BONE METASTASES OF THYROID TUMORS SHOULD BE TREATED WITH BISPHOSPHONATES

Orita Y, et. al.

expensive and necessitates monthly infusions. One may be tempted to believe that in the case of slowly progressing bone metastases, pamidronate and other oral preparations of bisphosphonates are of similar

efficacy. It is hoped that more objective data will be available in the near future.

Albert G. Burger, MD

REFERENCE

1. Silverman SL, Landesberg R. Osteonecrosis of the jaw and the role of bisphosphonates: a critical review. *Am J Med* 2009;122(2 Suppl): S33-S45.



American Thyroid Association

Prevent
Diagnose
Treat

www.thyroid.org

Support valuable patient education
and crucial thyroid research!

The graphic features a profile of an elderly woman with white hair looking towards the right. The text is overlaid on a dark background with a teal header and footer.

DOES PLACENTAL IODINE STORAGE COMPENSATE FOR LOW MATERNAL IODINE INTAKE?

Burns R, et. al.

References

1. Burns R, O'Herlihy C, Smyth PPA. The placenta as a compensatory iodine storage organ. *Thyroid*. March 21, 2011 [Epub ahead of print].
2. Bidart JM, Lacroix L, Evain-Brion D, Caillou B, Lazar V, Frydman R, Bellet D, Filetti S, Schlumberger M. Expression of Na⁺/I⁻ symporter and Pendred syndrome genes in trophoblast cells. *J Clin Endocrinol Metab* 2000;85:4367-72.
3. Arturi F, Lecroix L, Presta I, Scarpelli D, Caillou B, Schlumberger M, Russo D, Bidart JM, Filetti S. Regulation by human chorionic gonadotropin of sodium/iodide symporter gene expressions in the JAr human choriocarcinoma cell line. *Endocrinology* 2002;143:2216-20.
4. Schröder-van der Elst JP, van der Heide D, Kastelijns J, Rousset B, Obregón MJ. The expression of the sodium/iodide symporter is up-regulated in the thyroid of fetuses of iodine-deficient rats. *Endocrinology* 2001;142:3736-41.
5. Gulaboglu M, Borekci B, Halici Z. Placental tissue iodine level and blood magnesium concentration in pre-eclamptic and normal pregnancy. *Int J Gynaecol Obstet* 2007;98:100-4. Epub June 19, 2007.

DEDICATED TO SCIENTIFIC INQUIRY, CLINICAL EXCELLENCE, PUBLIC SERVICE, EDUCATION, AND COLLABORATION.



AMERICAN THYROID ASSOCIATION
FOUNDED 1923



ATA Publications



Public & Patients



Physicians & Professionals

www.thyroid.org

ABOUT THE ATA GIVE ONLINE JOIN THE ATA FELLOWS' CORNER MEMBERS ONLY

We invite you to join the ATA!

Are You Intrigued by the Study of the Thyroid? You Belong in the ATA!

- ATA members are leaders in thyroidology who promote excellence and innovation in clinical care, research, education, and public policy.
- Join us as we advance our understanding of the causes and improve the clinical management of thyroid diseases in this era of rapid pace biomedical discovery.
- A close-knit, collegial group of physicians and scientists, the ATA is dedicated to the research and treatment of thyroid diseases. ATA's rich history dates back to 1923 and its members are respected worldwide as leaders in thyroidology.
- The ATA encourages you to apply for membership. We want you to experience the wealth of knowledge and enjoy the benefits of being active in this highly specialized and regarded society. The ATA looks forward to having you as a member!

THE PREDICTION FOR MALIGNANCY OF THE CYTOLOGIC DIAGNOSIS “SUSPICIOUS FOR HÜRTHLE-CELL NEOPLASM” IS LOW IN PATIENTS WITH HASHIMOTO’S DISEASE

Roh MH, et. al.

cytologic diagnosis of SFNHCT. I think that the clinician faced with this cytologic diagnosis must use all of the other factors concerning the nodule before making a decision for surgery versus watchful waiting. In the

patient with Hashimoto’s disease and a small nodule, I would wait rather than send the patient to surgery.

Jerome M. Hershman, MD

REFERENCE

1. Mukasa K, Noh JY, Kunii Y, Matsumoto M, Sato S, Yasuda S, Suzuki M, Ito K, Ito K. Prevalence of malignant tumors and adenomatous lesions detected by ultrasonographic screening in patients with autoimmune thyroid diseases. *Thyroid* 2011;21:37-41. Epub October 9, 2010.

or levothyroxine, which affects patients on thyroid hormone replacement therapy, requiring an increase in the dosage of hormone or a decrease in cases in which soy protein is discontinued from the diet. Finally, the effect of estrogen replacement on thyroid

function in women on thyroid therapy is well known (8) and carefully analyzed in an editorial by the late Robert Utiger (9).

Jorge H. Mestman, MD

References

1. Teede HJ, Dalais FS, McGrath BP. Dietary soy containing phytoestrogens does not have detectable estrogenic effects on hepatic protein synthesis in postmenopausal women. *Am J Clin Nutr* 2004;79:396-401.
2. Duncan AM, Merz BE, Xu X, Nagel TC, Phipps WR, Kurzer MS. Soy isoflavones exert modest hormonal effects in premenstrual women. *J Clin Endocrinol Metab* 1999;84:192-7.
3. Chang HC, Doerge DR. Dietary genistein inactivates rat thyroid peroxidase in vivo without and apparent hypothyroid effect *Toxicol Appl Pharmacol* 2000;168: 244-52.
4. Son HY, Nishikawa A, Ikeda T, Imazawa T, Kimura S, Hirose M. Lack of effect of soy isoflavone on thyroid hyperplasia in rats receiving an iodine-deficient diet. *Jpn J Cancer Res* 2001;92:103-8.
5. Messina M, Redmond G. Effects of soy protein and soybean isoflavones on thyroid function in healthy adults and hypothyroid patients: a review of the relevant literature. *Thyroid* 2006;16:249-58.
6. Effects of soy protein and isoflavones on circulating hormone concentrations in pre- and post-menopausal women: a systematic review and meta-analysis. *Hum Reprod Update* 2009;15:423-
7. 440
8. Ishizuki Y, Hirooka Y, Murata Y et al: The effects on the thyroid gland of soybeans administered experimentally to healthy subjects. *Nippon Naibunpu Kashi (Folia Endocrinol)* 1991;67:622-629
9. Arafah BM. Increased need for thyroxine in women with hypothyroidism during estrogen therapy. *N Engl J Med* 2001;344:1743-9.
10. Utiger RD. Estrogen, thyroxine binding in serum, and thyroxine therapy. *N Engl J Med* 2001;344:1784-5.

ATA invites You to Join Us at the...



The poster for the 81st Annual Meeting of the American Thyroid Association (ATA) features a green and white color scheme. At the top, it reads "81ST Annual Meeting" in a large, bold, black font. Below this is a collage of images: a modern building, a white butterfly logo, a scenic view of a resort, and a golf course. The text "AMERICAN THYROID ASSOCIATION" is centered in a serif font, with "FOUNDED 1923" underneath. At the bottom, the dates "OCTOBER 26-30, 2011" are prominently displayed, followed by the location "Renaissance Esmeralda Resort and Spa Indian Wells, California" and the website "www.thyroid.org".

The American Thyroid Association is the leading organization focused on thyroid biology and the prevention and treatment of thyroid disorders through excellence and innovation in research, clinical care, education, and public health.

At the 81st Annual Meeting of the American Thyroid Association (ATA), attendees will experience top-notch educational sessions, great networking opportunities and unmatched collegiality -- all under one-roof.

Nestled at the base of the majestic Santa Rosa Mountains in Indian Wells near Palm Springs, CA, the Renaissance Esmeralda Resort & Spa is the Sonoran Desert's finest oasis, a perfect setting for ATA attendees from around the world to meet.

Chaired by Drs. Anthony Hollenberg and Martha Zeiger, the ATA Program Committee promises to

offer the outstanding agenda expected by those who choose the ATA meeting as their 'favorite' scientific educational experience - year after year. Past attendees attest to the unmatched excellence and environment of the ATA meeting noting:

- "Great combination of clinical and basic research"
- "Presentations and posters are excellent"
- "Well organized and top notch"
- "The science improves every year"

WHY SHOULD YOU ATTEND? Earn CME credits, hear innovative talks on clinical topics, participate in interactive sessions, develop professionally with state of the art information, and meet with friends and colleagues.

WHO WILL BE THERE? The community of endocrinologists, internists, surgeons, basic scientists, nuclear medicine scientists, pathologists, endocrine fellows and nurses, physician assistants and other health care professionals who wish to broaden and update their knowledge of the thyroid gland and its disorders. Clinical, Basic and Surgical Fellows will have a customized educational track to enhance their meeting experience.

REGISTRATION

ATA meeting registration is open to all health care professionals interested in broadening their knowledge of the thyroid gland and its disorders. **Visit the ATA website for registration details and meeting information as available at www.thyroid.org.**

HOTEL

Book your hotel reservation now and mention the ATA to receive the special group rate. Renaissance Esmeralda Resort & Spa, 44-400 Indian Wells Lane, Indian Wells, CA 92210; 760-773-4444 or 800-446-9875.

Call for Abstracts



www.thyroid.org



Call for Abstracts Submission Deadlines

- Regular call: Site opens – Wednesday, April 27, 2011
Site closes – Wednesday, June 22, 2011
Acceptance notification – Monday, July 25, 2011
- Short call: Site opens – Wednesday, September 7, 2011
Site closes – Wednesday, September 21, 2011
Acceptance notification – Monday, September 26, 2011

ATA Abstract Submission Policy and Responsibilities of the Author: The ATA requests submission of abstracts for consideration at ATA scientific meetings to feature new data presented as posters or oral presentations. The ATA goal is to provide the audience and the media with new data that are unpublished (in print or electronic) which are being publicly presented for the first time. Authors are asked to strictly comply with this requirement; data that are to become available to the public *in the setting of a national or international meeting* before their presentation at the ATA meeting are not eligible for presentation at the ATA meeting. Data may be submitted for publication before or after abstract submission to the ATA. However, data accepted for publication prior to the ATA meeting would REQUIRE the authors to request the publisher to embargo their publication (electronic and print) until **8:00 am local time the first day of the meeting**, or would REQUIRE the authors to withdraw their abstract from the ATA meeting. Many editors are favorable to embargo requests because of the attention that may be drawn to the publication after original presentation of the data at a major meeting. Further, the authors are welcome to announce the date and place of their anticipated publication if known. Authors that do not comply with this policy may be restricted from future abstract submissions for a term to be determined by the ATA Executive Committee. Arbitration, if needed, will occur via the ATA Board of Directors. **Abstracts are reviewed in confidence by the ATA program committee with possible ad hoc members.**

Additional policies:

- **CHARACTER LIMIT:** There is a limit of 2,245 characters (approx. 300 words) for the text of your submission.
- Authors of accepted posters are required to be present during the assigned poster sessions.
- Scientific materials presented at the ATA Annual Meeting must not have been submitted for publication at the time of abstract submission or presented at a scientific meeting before the 81st Annual Meeting of the ATA (local and regional meetings excluded).
- All abstracts must be filed electronically via the American Thyroid Association website www.thyroid.org. Submissions will not be accepted by fax or mail.
- All materials must arrive on or before the abstract deadlines noted above.
- Authorship on multiple abstracts is permitted.

Short Call Abstracts

- Short Call Abstracts are reserved for the presentation of the very latest, important thyroid-related research with high impact. Submission of a Short Call Abstract does not guarantee acceptance for presentation. (Please note that regular research reports should be submitted by the Regular Abstract deadline.)
- Only Six (6) Short Call Abstracts will be selected for 10-minute oral presentations during a special symposium. Selected additional Short Call Abstracts may be presented as special posters. All other submissions will not be published.
- Acceptance notices for those selected will be e-mailed on or before September 26, 2011. Online confirmation is required.

American Thyroid Association

CME Meet-the-Professor Seminars Online

Register now at www.thyroid.org

Increase your understanding of clinical management of thyroid disease and thyroid cancer. Join the American Thyroid Association (ATA) for monthly educational seminars. Spend one hour a month taking advantage of this unique opportunity to hear top thyroid experts in "Meet-the-Professor" style seminars in the convenience of your office. Earn CME Credit (1 AMA PRA Category 1 Credit™ available per course).

UPCOMING COURSES:

Clinical Trials for Progressive Thyroid Carcinoma

Steven I Sherman, MD
The University of Texas M. D. Anderson Cancer Center
Tuesday, June 21, 2011, 11:00 AM ET
1 CME Credit Available



Traditional cytotoxic chemotherapies have been ineffective and rarely used for the treatment of advanced or progressive thyroid cancers. Recent developments in understanding the biology of thyroid cancers combined with emergence of appropriately targeted therapies are providing exciting new opportunities for patients to be treated. Hear an update on results of the most recent clinical trials from a leader in this field.

Controversies in Surgery for Well Differentiated Thyroid Cancer

Ralph P. Tufano, MD, FACS
Johns Hopkins University School of Medicine
SPECIAL TIME: Tuesday, July 12, 2011, 4:00 PM ET
1 CME Credit Available



Thyroid cancer has the most rapidly rising incidence of all cancers in the United States. The American Thyroid Association Management Guidelines for Patients in Thyroid Nodules and Differentiated Thyroid Cancer have provided recommendations for the extent of surgery based on the best evidence available. Despite these guidelines, controversy exists on what is the appropriate extent of surgery for well differentiated thyroid cancer. This seminar will discuss those controversies and the rationale for the ATA guideline recommendations addressing these areas which will include: extent of thyroidectomy as well as indications for and extent of central and lateral neck dissection.

Costs: \$119 for ATA members per webinar/\$149 for non-members per webinar. Register to participate in the live streaming programs or purchase recordings if you have a schedule conflict with the live broadcast.

Target Audience: Endocrinologists, internists, surgeons, basic scientists, nuclear medicine scientists, pathologists, endocrine and surgery fellows, nurses, physician assistants and other health care professionals who wish to broaden and update their knowledge of the thyroid gland and its disorders.

Disclosures: Disclosures for presenting faculty and content controllers will be provided to attendees on-screen at the live webinar activity.

Accreditation and Designation Statement: intellyst® Medical Education is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. intellyst® Medical Education designates each of these live activities for a maximum of 1 AMA PRA Category 1 Credit™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

(703) 998-8890

www.thyroid.org

thyroid@thyroid.org

Dedicated to scientific inquiry, clinical excellence, public service, education & collaboration