

# Clinical THYROIDOLOGY FOR PATIENTS

VOLUME 6 • ISSUE 8 • 2013



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Levothyroxine is the most common form of thyroid hormone replacement therapy. Prior to the availability of the pure levothyroxine, desiccated animal thyroid extract was the only treatment for hypothyroidism and some individuals still prefer desiccated thyroid extract as a more “natural” thyroid hormone. This study was performed to compare levothyroxine to desiccated thyroid extract in terms of thyroid blood tests, changes in weight, psychometric test results and patient preference.

Hoang TD et al Desiccated thyroid extract compared with levothyroxine in the treatment of hypothyroidism: A randomized, double-blind, crossover study. *J Clin Endocrinol Metab* 2013;98:1982-90. Epub March 28, 2013.

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Hypothyroidism is common among women of child-bearing age. Hypothyroidism that is either undiagnosed or under-treated can contribute to infertility and can result in miscarriage. This study was designed to compare the success of IVF in hypothyroid women treated with adequate doses of levothyroxine compared to women undergoing the same procedure with normal thyroid function.

Busnelli A et al. In vitro fertilization outcomes in treated hypothyroidism. *Thyroid*. April 2, 2013 [Epub ahead of print].

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#### **Severe sight-threatening orbitopathy is a very rare event in the natural history of Graves' disease**

Graves' orbitopathy is a severe complication of Graves' disease that can be disfiguring and affect vision. The prevalence and development of Graves' orbitopathy has not been well studied. This study was designed to evaluate the occurrence and features of Graves' orbitopathy in newly diagnosed patients with Graves' disease who are started on antithyroid drugs and followed for 18 months.

Tanda ML et al Prevalence and natural history of Graves' orbitopathy in a large series of patients with newly diagnosed Graves' hyperthyroidism seen at a single center. *J Clin Endocrinol Metab* 2013;98:1443-9.

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#### **Stimulated thyroglobulin levels obtained after thyroidectomy are a good indicator for risk of future recurrence from thyroid cancer.**

Thyroglobulin is a protein secreted only by thyroid cells, both normal and cancerous thyroid cells. After thyroidectomy and removal of most of the normal thyroid cells, blood thyroglobulin levels are used to detect thyroid cancer recurrence. In this study, the authors examined the ability of thyroglobulin levels measured after initial thyroidectomy to accurately predict the chance for future thyroid cancer recurrence in high risk patients.

Piccardo, A. et al. Focus on high-risk DTC patients: high postoperative serum thyroglobulin level is a strong predictor of disease persistence and is associated to progression-free survival and overall survival. *Clin Nucl Med* 38 (1): 18-24, 2013.

### THYROID CANCER .....10

#### **Only a few thyroid cancer patients have a cancer recurrence within 8 years of initial therapy**

While only a small number of patients with papillary cancer die from their cancer, recurrence of the cancer is relatively common and patients are followed for many years for recurrence of the cancer. However, it is not clear how long and how often patients with papillary cancer need a follow up. This study was done to find out the time and rate of recurrence in patients with papillary thyroid cancer to improve the management of these patients.

Durante C et al, Papillary thyroid cancer: time course of recurrences during postsurgery surveillance. *J Clin Endocrinol Metab* 2013;98:636-42. Epub January 4, 2013.

### ATA ALLIANCE FOR THYROID PATIENT EDUCATION .....12 ATA Alliance Calendar .....14



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## Clinical Thyroidology for Patients

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# CLINICAL THYROIDOLOGY **FOR PATIENTS**

A publication of the American Thyroid Association

VOLUME 6 • ISSUE 8 • 2013

## EDITOR'S COMMENTS

Welcome to **Clinical Thyroidology for Patients**, bringing to you, the patient, the most up-to-date, cutting edge thyroid research. What you read here as research studies will likely become the accepted practice in the future. *Clinical Thyroidology for Patients* is published on a monthly basis and includes summaries of research studies that were discussed in a recent issue of *Clinical Thyroidology*, a publication of the American Thyroid Association for physicians. This means that you, the patients, are getting the latest information on thyroid research and treatment almost as soon as your physicians.

We will be providing even faster updates of late-breaking thyroid news through **Twitter** at [@thyroidfriends](https://twitter.com/thyroidfriends) and on **Facebook**. Our goal is to provide you with the tools to be the most informed thyroid patient in the waiting room. Also check out our friends in the **ATA Alliance for Thyroid Patient Education**. The Alliance member groups consist of: the *American Thyroid Association*, the *Graves' Disease and Thyroid Foundation*, the *Light of Life Foundation*, *ThyCa: Thyroid Cancer Survivors Association*, *Thyroid Cancer Canada* and *Thyroid Federation International*.

### In this issue, the studies ask the following questions:

- Is there any difference between Levothyroxine and desiccated thyroid extract in the treatment of hypothyroidism?
- Are IVF pregnancy outcomes any different in hypothyroid women?
- How common is severe orbitopathy in patients with Graves' disease?
- Do stimulated thyroglobulin levels predict the risk for thyroid cancer recurrence?
- What is the risk of cancer recurrence in patients with thyroid cancer?

We welcome your feedback and suggestions. Let us know what you want to see in this publication. I hope you find these summaries interesting and informative.

— Alan P. Farwell, MD

**HYPOTHYROIDISM****Desiccated thyroid extract vs Levothyroxine  
in the treatment of hypothyroidism****BACKGROUND**

Hypothyroidism, or an underactive thyroid gland, is a common endocrine problem and requires lifelong treatment with thyroid hormone pills. Untreated hypothyroidism is associated with a wide variety of symptoms, many of which are nonspecific. In particular, memory problems and depression (psychometric problems) as well as weight gain are very common symptoms in hypothyroidism but also have multiple other nonthyroidal causes as well. Levothyroxine is the main thyroid hormone produced by the thyroid gland and the synthetic form is the most common form of thyroid hormone replacement therapy. Prior to the availability of the pure levothyroxine, desiccated animal thyroid extract was the only treatment for hypothyroidism. Today, some individuals prefer desiccated thyroid extract as a more “natural” thyroid hormone. In addition, some patients who continue to have symptoms of hypothyroidism when taking levothyroxine report improvement in these symptoms when switched to desiccated thyroid extract. This study was performed to compare levothyroxine to desiccated thyroid extract in terms of thyroid blood tests, changes in weight, psychometric test results and patient preference.

**THE FULL ARTICLE TITLE**

Hoang TD et al Desiccated thyroid extract compared with levothyroxine in the treatment of hypothyroidism: A randomized, double-blind, crossover study. *J Clin Endocrinol Metab* 2013;98:1982-90. Epub March 28, 2013.

**SUMMARY OF THE STUDY**

This was a study of 70 patients with hypothyroidism who were treated with either desiccated thyroid extract or levothyroxine for 12 weeks followed by a switch to

the other option for another 16 weeks. The participants were “blinded” during both phases – they did not know the type of pill they received. After each treatment period patients were weighed, had blood tests, underwent psychometric testing and were asked which therapy they preferred. The researchers report that 49% of the patients preferred desiccated thyroid extract, 19% preferred levothyroxine and 23% had no preference. Desiccated thyroid extract use was also associated with more weight loss. There was no difference in the psychometric testing or in any symptoms. Both types of thyroid hormone were able to normalize the abnormal thyroid blood tests.

**WHAT ARE THE IMPLICATIONS  
OF THIS STUDY?**

Although desiccated thyroid extract is not widely used, this study showed that many patients preferred this option as compared with levothyroxine. This result was observed despite there being no differences in thyroid function blood test and psychometric test results, although use of desiccated thyroid extract was associated with some weight loss. These results suggest that there may be a certain number of patients in who desiccated thyroid extract might be a reasonable treatment option. Further research is needed on this topic to confirm which patients this might benefit the most from desiccated thyroid extract therapy.

Angela M. Leung, MD, MSc

**ATA THYROID BROCHURE LINKS**

Hypothyroidism: <http://www.thyroid.org/what-is-hypothyroidism>

Thyroid Hormone Treatment: <http://www.thyroid.org/thyroid-hormone-treatment>

**ABBREVIATIONS & DEFINITIONS**

**Hypothyroidism:** a condition where the thyroid gland is underactive and doesn't produce enough thyroid hormone. Treatment requires taking thyroid hormone pills.

**Levothyroxine (T4):** the major hormone produced by

the thyroid gland and available in pill form as Levoxyl™, Synthroid™, Levothroid™ and generic preparations.

**Desiccated thyroid extract:** thyroid hormone pill made from animal thyroid glands. Currently desiccated thyroid extract is made from pig thyroids and is available as Armour Thyroid™ and Nature-Throid™.

**THYROID AND PREGNANCY****IVF pregnancy outcomes in women with treated hypothyroidism and women without thyroid disease****BACKGROUND**

Hypothyroidism is common among women of child-bearing age. The most common cause of hypothyroidism in the United States is the autoimmune disease Hashimoto's thyroiditis. This is caused by the body developing antibodies that attack and destroy the thyroid. Hypothyroidism that is either undiagnosed or under-treated can contribute to infertility and can result in miscarriage. Several, but not all studies have suggested that treating women with hypothyroidism with levothyroxine improves pregnancy rates and reduces the risk of miscarriage. This study was designed to compare the success of in vitro fertilization (IVF) carried out in hypothyroid women treated with adequate doses of levothyroxine compared to women undergoing the same procedure with normal thyroid function. The goal was to see if appropriate treatment of the hypothyroidism normalized the success and live birth rates following IVF.

**THE FULL ARTICLE TITLE**

Busnelli A et al. In vitro fertilization outcomes in treated hypothyroidism. *Thyroid*. April 2, 2013 [Epub ahead of print].

**SUMMARY OF THE STUDY**

At an infertility clinic in Italy, 137 women with hypothyroidism were treated with levothyroxine to normalize their TSH and compared to 274 age-matched control women with normal thyroid function. Both groups underwent IVF. The main outcome measurement was live birth rate per IVF cycle. The two groups were similar in regards to baseline TSH, smoking history, menstrual regularity and cycle length, number of prior deliveries and indications for the IVF procedure. The treated hypothyroid women had more cancelled IVF cycles

due to poor response, the need for longer hormone stimulation to get their ovaries to respond and a greater proportion who did not undergo embryo transfer than did the control women. However, once the embryos were transferred there was no difference between the groups in regards to pregnancy rate (36% vs. 34%), proportion of women who had a miscarriage (16% vs. 22%) and live birth rates (30% of treated hypothyroid vs. 27% of the controls). There were no differences in outcomes in the hypothyroid patients between those women who had antibody positive autoimmune thyroid disease and those who were hypothyroid without any antibodies.

**WHAT ARE THE IMPLICATIONS OF THIS STUDY?**

In this study, women with adequately treated hypothyroidism had no difference in pregnancy rates and live births compared to women with normal thyroid function, although the hypothyroid women did have less response to hormonal ovarian stimulation and a lower rate of embryo transfer. This adds to the data that shows the importance of identifying and treating women with hypothyroidism before attempting either natural conception or undergoing IVF.

— Glenn D. Braunstein, M.D.

**ATA THYROID BROCHURE LINKS**

Hypothyroidism: <http://www.thyroid.org/what-is-hypothyroidism>

Thyroid Hormone Treatment: <http://www.thyroid.org/thyroid-hormone-treatment>

Thyroid and Pregnancy: <http://www.thyroid.org/thyroid-disease-and-pregnancy>

**ABBREVIATIONS & DEFINITIONS**

**Autoimmune thyroid disease:** a group of disorders that are caused by antibodies that get confused and attack the thyroid. These antibodies can either turn on the

thyroid (Graves' disease, hyperthyroidism) or turn it off (Hashimoto's thyroiditis, hypothyroidism).

**Hypothyroidism:** a condition where the thyroid gland is underactive and doesn't produce enough thyroid hormone. Treatment requires taking thyroid hormone pills.

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## THYROID AND PREGNANCY, continued

**Subclinical Hypothyroidism:** a mild form of hypothyroidism where the only abnormal hormone level is an increased TSH. There is controversy as to whether this should be treated or not.

**Overt Hypothyroidism:** clear hypothyroidism with an increased TSH and a decreased T4 level. All patients with overt hypothyroidism are usually treated with thyroid hormone pills.

**Levothyroxine (T4):** the major hormone produced by the thyroid gland and available in pill form as Levoxyl™, Synthroid™, Levotheroid™ and generic preparations.

**TSH: thyroid stimulating hormone** — produced by the pituitary gland that regulates thyroid function; also

the best screening test to determine if the thyroid is functioning normally.

**In-vitro fertilization:** a procedure when an egg is fertilized outside of the body and then implanted in a woman to achieve a pregnancy. The woman undergoing IVF is treated with hormones to stimulate the ovaries before IVF (hormonal ovarian stimulation).

**Antibodies:** proteins that are produced by the body's immune cells that attack and destroy bacteria and viruses that cause infections. Occasionally the antibodies get confused and attack the body's own tissues, causing autoimmune disease.





## **HYPERTHYROIDISM**

### **Severe sight-threatening orbitopathy is a very rare event in the natural history of Graves' disease**

#### **BACKGROUND**

Thyroid eye disease is a severe complication of autoimmune thyroid disease and is most commonly associated with Graves' disease, although it can be seen with Hashimoto's thyroiditis and in patients with normal thyroid function but positive thyroid antibodies. When associated with Graves' disease, it is often referred to as Graves' orbitopathy. The most common cause of hyperthyroidism, Graves' disease is an autoimmune disease characterized by antibodies that bind to the TSH receptor and stimulate the production of thyroid hormone in the thyroid gland. These antibodies can also bind to tissue that surrounds the eyes resulting in local swelling, bulging of the eyes and impaired function of the eye muscles. This condition can be disfiguring and affect the quality of life and in severe cases, it can affect the vision. The prevalence and development of Graves' orbitopathy has not been well studied. This study was designed to evaluate the occurrence and features of Graves' orbitopathy in newly diagnosed patients with Graves' disease who are started on antithyroid drugs and followed for 18 months.

#### **THE FULL ARTICLE TITLE**

Tanda ML et al Prevalence and natural history of Graves' orbitopathy in a large series of patients with newly diagnosed Graves' hyperthyroidism seen at a single center. J Clin Endocrinol Metab 2013;98:1443-9.

#### **SUMMARY OF THE STUDY**

The study included 346 patients newly diagnosed with Graves' hyperthyroidism and started on Methimazole in Italy over a 8-year period. The patients were mainly women ages 15 to 84 years and 35% were smokers. At diagnosis, 74% of patients had no evidence of orbitopathy, 20% had mild or inactive orbitopathy, 6% had moderate or severe orbitopathy and one patient had

vision-threatening orbitopathy. There was an association between moderate to severe Graves' orbitopathy and smoking, serum TSH receptor antibody levels and age (in women only). Of the 194 patients without initial Graves' orbitopathy, 87% remained free of orbitopathy, 10% developed mild orbitopathy and 3% developed moderate to severe active orbitopathy. Of the 43 patients with baseline mild Graves' orbitopathy, 58% were free of orbitopathy, 40% continued to have mild and inactive orbitopathy and one patient (2%) progressed to moderate to severe active orbitopathy. Serum TSH receptor antibodies decreased progressively on the Methimazole treatment in most patients, however, the decrease was less pronounced in patients with progression of Graves' orbitopathy.

#### **WHAT ARE THE IMPLICATIONS OF THIS STUDY?**

This study confirms that most patients with Graves' disease have no signs of Graves' orbitopathy at diagnosis and will not develop orbitopathy later. When orbitopathy develops in these patients, it is usually mild. Most patients with mild Graves' orbitopathy at diagnosis will either have a remission or no progression of the orbitopathy over time. This is important to help reassure patients with Graves' disease. While smoking is associated with progression of Graves' orbitopathy, further studies are needed to clarify other prognostic factors.

Alina Gavrilă, MD, MMSC

#### **ATA THYROID BROCHURE LINKS**

Hyperthyroidism: <http://www.thyroid.org/what-is-hyperthyroidism>

Graves' disease: <http://www.thyroid.org/what-is-graves-disease>

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## **HYPERTHYROIDISM, continued**

### **ABBREVIATIONS & DEFINITIONS**

**Hyperthyroidism:** a condition where the thyroid gland is overactive and produces too much thyroid hormone. Hyperthyroidism may be treated with anti-thyroid medications (Methimazole, Propylthiouracil), radioactive iodine or surgery.

**Graves' disease:** the most common cause of hyperthyroidism in the United States. It is caused by antibodies that attack the thyroid and turn it on.

**Autoimmune thyroid disease:** a group of disorders that are caused by antibodies that get confused and attack the thyroid. These antibodies can either turn on the thyroid (Graves' disease, hyperthyroidism) or turn it off (Hashimoto's thyroiditis, hypothyroidism).

**Antibodies:** proteins that are produced by the body's immune cells that attack and destroy bacteria and viruses that cause infections. Occasionally the antibodies get confused and attack the body's own tissues, causing autoimmune disease.

**TSH receptor:** a molecule (protein) located on the thyroid cell surface that binds TSH and stimulates the production of the thyroid hormones within the thyroid cell.

**TSH: thyroid stimulating hormone** — produced by the pituitary gland that regulates thyroid function; also the best screening test to determine if the thyroid is functioning normally.

**Thyroid eye disease (TED):** also known as Graves' orbitopathy. TED is most often seen in patients with Graves' disease but also can be seen with Hashimoto's thyroiditis. TED includes inflammation of the eyes, eye muscles and the surrounding tissues. Symptoms include dry eyes, red eyes, bulging of the eyes and double vision.

**Methimazole:** an antithyroid medication that blocks the thyroid from making thyroid hormone. Methimazole is used to treat hyperthyroidism, especially when it is caused by Graves' disease.

**Thyroidectomy:** surgery to remove the entire thyroid gland.

**Radioactive iodine (RAI):** this plays a valuable role in diagnosing and treating thyroid problems since it is taken up only by the thyroid gland. I-131 is the destructive form used to destroy thyroid tissue in the treatment of an overactive thyroid and thyroid cancer.



## THYROID CANCER

### Stimulated thyroglobulin levels obtained after thyroidectomy are a good indicator for risk of future recurrence from thyroid cancer

#### BACKGROUND

Thyroid cancer is the fastest rising cancer in women. Initial therapy includes thyroidectomy which is often followed by radioactive iodine therapy. After initial thyroidectomy, patients with thyroid cancer are at risk for recurrence of their cancer in the neck and/or lungs/bones. Currently, the treating physician estimates the risk for thyroid cancer recurrence based on the cancer's pathologic characteristics such as the presence of cancer invasion into blood vessels, spread of cancer to the lymph nodes and the type and size of the cancer. Patients are classified as low, intermediate or high risk for future recurrence based on those characteristics. Thyroglobulin is a protein secreted only by thyroid cells, both normal and cancerous thyroid cells. After thyroidectomy and removal of most of the normal thyroid cells, blood levels of thyroglobulin fall and are often undetectable. Blood thyroglobulin levels are used to detect thyroid cancer recurrence, as an increase after thyroidectomy likely comes from thyroid cancer cells. In this study, the authors examined the ability of thyroglobulin levels measured after initial thyroidectomy to accurately predict the chance for future thyroid cancer recurrence in high risk patients.

#### THE FULL ARTICLE TITLE

Piccardo, A. et al. Focus on high-risk DTC patients: high postoperative serum thyroglobulin level is a strong predictor of disease persistence and is associated to progression-free survival and overall survival. Clin Nucl Med 38 (1): 18-24, 2013.

#### SUMMARY OF THE STUDY

A total of 243 patients with high risk thyroid cancer were selected for the study. They were all treated similarly with total thyroidectomy and radioactive iodine therapy while

they were off thyroid hormone replacement. Thyroglobulin levels were measured before the first radioactive iodine therapy. The patients were followed for an average of 5 years. The authors recorded the response to the initial thyroid cancer treatment and subsequent treatments (if any). The ability of initial thyroglobulin measurement to predict the response to thyroid cancer therapy and overall patient outcome was then studied.

The authors showed that a thyroglobulin level > 50 ng/dl after initial surgery and without thyroid hormone replacement is able to accurately predict future reappearance of thyroid cancer in 97% of high risk patients, while an undetectable thyroglobulin level was a good predictor of an excellent outcome from thyroid cancer in most high risk patients (126 out 136 patients).

#### WHAT ARE THE IMPLICATIONS OF THIS STUDY?

Thyroglobulin levels after initial surgery are a good predictor of future thyroid cancer reappearance in patients deemed to be at high risk for cancer recurrence based on clinical characteristics. Thyroglobulin level can therefore be measured after surgery to help guide patient follow up and treatment.

— Mona Sabra, MD

#### ATA THYROID BROCHURE LINKS

Thyroid cancer: <http://www.thyroid.org/cancer-of-the-thyroid-gland>

Radioactive Iodine Therapy: <http://www.thyroid.org/radioactive-iodine>

Thyroid Surgery: <http://thyroid.org/patients/patient-brochures/surgery.html>

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## **THYROID CANCER**, continued

### **ABBREVIATIONS & DEFINITIONS**

**Thyroidectomy:** surgery to remove the entire thyroid gland. When the entire thyroid is removed it is termed a total thyroidectomy. When less is removed, such as in removal of a lobe, it is termed a partial thyroidectomy.

**Radioactive iodine (RAI):** this plays a valuable role in diagnosing and treating thyroid problems since it is taken up only by the thyroid gland. I-131 is the destructive form used to destroy thyroid tissue in the

treatment of thyroid cancer and with an overactive thyroid. I-123 is the non-destructive form that does not damage the thyroid and is used in scans to take pictures of the thyroid (Thyroid Scan) or to take pictures of the whole body to look for thyroid cancer (Whole Body Scan).

**Cancer recurrence:** this occurs when the cancer comes back after an initial treatment that was successful in destroying all detectable cancer at some point.

**THYROID CANCER****Only a few thyroid cancer patients have a cancer recurrence within 8 years of initial therapy****BACKGROUND**

Thyroid cancer is the fastest rising cancer in women and the most common type of thyroid cancer is papillary cancer. The majority of patients with papillary thyroid cancer do well after the treatment which includes surgery and often radioactive iodine therapy. While only a small number of patients with papillary cancer die from their cancer, recurrence of the cancer is relatively common and patients are followed for many years for recurrence of the cancer. However, it is not clear how long and how often patients with papillary cancer need a follow up. This study was done to find out the time and rate of recurrence in patients with papillary thyroid cancer to improve the management of these patients.

**FULL ARTICLE TITLE**

Durante C et al, Papillary thyroid cancer: time course of recurrences during postsurgery surveillance. J Clin Endocrinol Metab 2013;98:636-42. Epub January 4, 2013.

**SUMMARY OF THE STUDY**

This study looked at 2010 patients with papillary cancer seen at 8 Italian Centers between 1990 and 2012. In all patients, the entire thyroid was removed by surgery and radioactive iodine was performed in 88% of patients. Yearly follow up included ultrasound and blood tests for thyroglobulin. The average size of the cancer was 15 mm. More than one cancer in the thyroid was found in 1/3rd of patients. Extension of cancer outside of the thyroid was found in 245 patients and spread of cancer to the lymph

nodes in the neck in 255 patients. A total of 61.3% of patients were classified as low risk, 35.5% were intermediate risk and 3.2% were high risk.

During the first year after surgery 72 (7%) of the patients had persistent cancer. Only 2.5% of 625 low risk patients had persistent cancer as compared to 11.3% of the 362 patients with intermediate risk and 69.7% of the 33 patients with high risk. During 8 years of follow up, cancer recurrence was found only in 13 (1.4%) of the 948 patients considered to be disease-free after surgery and half of them recurred during the first 3 years. Of these 13 patients, 5 were low-risk and 8 were intermediate-risk patients.

**WHAT ARE THE IMPLICATIONS OF THIS STUDY?**

This study shows that cancer recurrence is very low in patients with papillary thyroid cancer that are classified as low or intermediate risk. These patients can likely be followed less often. However, high-risk patients still need more frequent careful follow up.

— Jamshid Farahati, MD

**ATA THYROID BROCHURE LINKS**

Thyroid cancer: <http://www.thyroid.org/cancer-of-the-thyroid-gland>

Radioactive Iodine Therapy: <http://www.thyroid.org/radioactive-iodine>

Thyroid Surgery: <http://thyroid.org/patients/patient-brochures/surgery.html>

**ABBREVIATIONS & DEFINITIONS**

**Papillary thyroid cancer:** the most common type of thyroid cancer.

**Papillary microcarcinoma:** a papillary thyroid cancer smaller than 1 cm in diameter

**Thyroglobulin:** a protein made only by thyroid cells, both normal and cancerous. When all normal thyroid tissue is destroyed after radioactive iodine therapy in patients with thyroid cancer, thyroglobulin can be used as a thyroid cancer marker in patients that do not have thyroglobulin antibodies.

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## **THYROID CANCER**, continued

**Radioactive iodine (RAI):** this plays a valuable role in diagnosing and treating thyroid problems since it is taken up only by the thyroid gland. I-131 is the destructive form used to destroy thyroid tissue in the treatment of thyroid cancer and with an overactive thyroid. I-123 is the non-destructive form that does not damage the thyroid and is used in scans to take

pictures of the thyroid (Thyroid Scan) or to take pictures of the whole body to look for thyroid cancer (Whole Body Scan).

**Cancer recurrence:** this occurs when the cancer comes back after an initial treatment that was successful in destroying all detectable cancer at some point.



## ATA Alliance for Thyroid Patient Education

### WELCOME

The American Thyroid Association is pleased to welcome our two newest members, **Thyroid Federation International** and **Thyroid Cancer Canada**, to the Alliance for Thyroid Patient Education.

### GOAL

The goal of our organizations is to provide accurate and reliable information for patients about the diagnosis, evaluation and treatment of thyroid diseases.

We look forward to future collaborations and continuing to work together towards the improvement of thyroid education and resources for patients.

### WHO WE ARE (in alphabetical order)

#### AMERICAN THYROID ASSOCIATION

[www.thyroid.org](http://www.thyroid.org)

ATA Patient Resources: <http://www.thyroid.org/patients/>

Find a Thyroid Specialist: [www.thyroid.org](http://www.thyroid.org)

Phone (toll-free): 1-800-THYROID

e-mail: [thyroid@thyroid.org](mailto:thyroid@thyroid.org)

**ATA Mission:** The ATA leads in promoting thyroid health and understanding thyroid biology.

**ATA Vision:** The ATA 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.

**ATA Values:** The ATA values scientific inquiry, clinical excellence, public service, education, collaboration, and collegiality.

To further our mission, vision and values the ATA sponsors “Friends of the ATA” online to advance the information provided to patients and the public such as this publication, *Clinical Thyroidology for Patients*. We welcome your support.

#### GRAVES’ DISEASE AND THYROID FOUNDATION

[www.gdatf.org](http://www.gdatf.org)

Phone (toll-free): 1-877-NGDF-123 or 643-3123

e-mail: [Gravesdiseasefd@gmail.com](mailto:Gravesdiseasefd@gmail.com)

Founded in 1990, the Graves’ Disease Foundation offers support and resources to Graves’ disease patients, their families, and health care professionals. Their mission is to find the cause of and the cure for Graves’ thyroid disease through research, to improve the quality of life for persons with Graves’ disease and their caregivers and to educate persons with Graves’ disease, their caregivers, healthcare professionals, and the general public about Graves’ disease and its treatment. The web site features a monitored bulletin board.

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AMERICAN  
THYROID  
ASSOCIATION  
FOUNDED 1923



ThyCa: Thyroid Cancer  
Survivors’ Association, Inc.<sup>SM</sup>  
[www.thyca.org](http://www.thyca.org)



Thyroid Cancer Canada  
Cancer de la thyroïde Canada



Light of Life Foundation  
[checkyourneck.com](http://checkyourneck.com)





## ATA Alliance for Thyroid Patient Education

Continued...

### LIGHT OF LIFE FOUNDATION

[www.checkyourneck.com](http://www.checkyourneck.com)

email: [info@checkyourneck.com](mailto:info@checkyourneck.com)

The Light of Life Foundation, founded in 1997, is a nonprofit organization that strives to improve the quality of life for thyroid cancer patients, educate the public and professionals about thyroid cancer, and promote research and development to improve thyroid cancer care.

### THYCA: THYROID CANCER SURVIVORS' ASSOCIATION, INC.

[www.thyca.org](http://www.thyca.org)

Phone (toll-free): 877 588-7904

e-mail: [thyca@thyca.org](mailto:thyca@thyca.org)

ThyCa: Thyroid Cancer Survivors' Association, Inc., founded in 1995, is an international nonprofit organization, guided by a medical advisory council of renowned thyroid cancer specialists, offering support and information to thyroid cancer survivors, families, and health care professionals worldwide.

### THYROID CANCER CANADA

[www.thyroidcancercanada.org](http://www.thyroidcancercanada.org)

Phone: 416-487-8267

Fax: 416-487-0601

e-mail: [info@thyroidcancercanada.org](mailto:info@thyroidcancercanada.org)

Thyroid Cancer Canada is a non-profit organization founded in 2000. The organization works towards creating an environment in which people who are dealing with thyroid cancer, especially the newly diagnosed, are met with support and information. Their goals & objectives include facilitating communication among thyroid cancer patients, providing credible information about the disease, providing emotional support, and assisting thyroid cancer patients with voicing their needs to health care professionals and those who are responsible for health care policy.

### THYROID FEDERATION INTERNATIONAL

<http://www.thyroid-fed.org/>

e-mail: [tfi@thyroid-fed.org](mailto:tfi@thyroid-fed.org)

Thyroid Federation International (TFI) was established in Toronto in 1995. Thyroid Federation International aims to work for the benefit of those affected by thyroid disorders throughout the world by providing a network of patient support organizations.



AMERICAN  
THYROID  
ASSOCIATION  
FOUNDED 1923



ThyCa: Thyroid Cancer  
Survivors' Association, Inc.<sup>SM</sup>  
[www.thyca.org](http://www.thyca.org)



Thyroid Cancer Canada  
Cancer de la thyroïde Canada





## **ATA Alliance for Thyroid Patient Education CALENDAR OF EVENTS**

Educational forums, patient support groups and other patient-oriented meetings

### **ATA Conferences** [www.thyroid.org](http://www.thyroid.org)

October 16–20, 2013 — San Juan, Puerto Rico

**83rd Annual Meeting of the American Thyroid Association (ATA)**

[www.thyroid.org](http://www.thyroid.org)

### **ThyCa Conferences** [www.thyca.org](http://www.thyca.org)

September 27–29, 2013 — Philadelphia, Pennsylvania

**16th International Thyroid Cancer Survivors' Conference -**

See more at: <http://www.thyca.org/support/conferences/>

Every Month

**ThyCa Support Group Meetings around the United States and in Canada, Costa Rica, and Philippines.** Complete list of groups, meetings, and contacts at [www.thyca.org](http://www.thyca.org)

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