Hyperthyroidism and Atrial Fibrillation (AF)

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January is Thyroid Disease Awareness Month

Your thyroid is a butterfly-shaped gland located at the base of your neck – just below your “Adam’s apple”. Although it weighs less than an ounce, the thyroid gland has a big impact on your health. Your metabolism is regulated by thyroid hormones.

Disorders of the thyroid generally cause two types of problems. The thyroid may produce either too much thyroid hormone (hyperthyroidism), or too little (hypothyroidism). Both types of disorders are common.

Thyroid hormones affect cardiac (heart) function. For people with heart disease, thyroid disorders can make heart symptoms worse, and even cause new symptoms. In addition, thyroid disease can cause cardiac problems even in people with healthy hearts.

Hyperthyroidism – the overproduction of thyroid hormone

Hyperthyroidism can resemble other health problems, and is sometimes difficult to diagnose. It can cause a wide variety of symptoms, including:

- Sudden weight loss; increased appetite
- Rapid heartbeat
- Nervousness, anxiety, and irritability
- Tremor in hands and fingers
- Sweating; difficulty tolerating hot weather
- Frequent bowel movements
- An enlarged thyroid gland
- Fatigue and muscle weakness
- Difficulty sleeping
- Thinning skin
- Fine brittle hair

Atrial Fibrillation (AF) – a serious abnormal heart rhythm

People with hyperthyroidism are known to be at increased risk for developing an irregular heartbeat known as atrial fibrillation (AF), as well as other irregular heart rhythms. About 10-15% of people with hyperthyroidism are at risk of developing AF.

Atrial fibrillation is a dangerous condition, and is the most common abnormal rhythm of the heart. In people with AF, the heart’s upper chambers (called “atria”) may quiver, causing the blood inside to pool and clot. If a blood clot leaves the heart, this can cause an embolism, stroke, or other disorder. About 15 percent of strokes occur in people with AF. Also, AF increases the odds for heart failure to occur.

The occurrence of AF increases with age. One study showed that 25% of hyperthyroid patients more than 60 years old had atrial fibrillation, compared to 5% in patients less than 60 years old.

Cardiac symptoms can occur in anyone with hyperthyroidism, and can be especially dangerous in people with underlying heart disease. Symptoms include:

- Fast heart rate (tachycardia) and heart palpitations
- Systolic hypertension (where the top number of your blood pressure reading is high)
- Shortness of breath with mild exercise
- Heart failure
- Worsening chest pain (angina), or even a heart attack

New Findings – low normal TSH is also a cause for concern

Even patients with normal thyroid hormone levels have an increased risk of atrial fibrillation if their TSH (Thyroid Stimulating Hormone) is low normal, according to a study published in 2012 [BMJ]. This suggests that individuals with low normal TSH values should be followed more closely than previously thought.

Testing

Hyperthyroidism can be confirmed with blood tests that measure the levels of T4 (thyroxine) and TSH (thyroid stimulating hormone) in your blood. High levels of T4 and low or nonexistent amounts of TSH indicate an overactive thyroid. TSH levels are important because this hormone signals the thyroid gland to produce more T4. These tests are especially necessary for older adults who may not have the classic symptoms of hyperthyroidism.

If you have a newly diagnosed heart problem – particularly atrial fibrillation – ask your doctor to check your thyroid through simple blood tests. Why? Controlling hyperthyroidism often results in significant improvement of heart symptoms.

Do not just assume it’s your nerves if you have shortness of breath, heart palpitations, or chest discomfort. Bring this to your doctor’s attention immediately! There are simple tests (such as an EKG or ultrasound) that your doctor can perform to assess your heart function.

Treatment

If you have been diagnosed with hyperthyroidism, it’s very important that you receive the necessary medical care. For persons with both hyperthyroidism and atrial fibrillation, you will need to take separate medications for your thyroid problem and for your atrial fibrillation. Your doctor may also recommend taking an anticoagulant to prevent a blood clot.

As Metropolitan Medical Laboratory celebrates our 100th year in 2014, your good health continues to be our passion. Follow your doctor’s advice. Take care of your thyroid, and take care of your heart!

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