

THURSDAY, JANUARY 19, 2012 – David Brownstein, MD
A New Illness Strikes: Media-Iodophobia

Folks, a new illness is rampaging the country. It causes extreme anxiety and fear. What is the name of this illness? Media-iodophobia. Media-iodophobia occurs when the news media erroneously reports the results of a medical article which causes anxiety and fear in the lay public.

I knew when I saw the headline in the Reuters article yesterday that I would be busy answering questions about the study. The headline read, “How much iodine is too much?” Even my publisher (whom I enjoy writing for) reported on the study today with the headline, “Too much iodine hurts thyroid function.” Does too much iodine hurt thyroid function?

To answer the question, I pulled the article and dissected it. The scientists studied 256 normal-thyroid adults in a four week, double-blind, placebo-controlled, randomized controlled trial.(1) The patients were randomly assigned to 12 intervention groups with iodine supplemented at doses ranging from 0-2mg/day. The researchers studied the effects of the differing doses of iodine by measuring thyroid function, thyroid size, and urinary iodine.

The authors found that, as compared with the placebo group, all the iodine- supplemented groups responded with significantly increased urinary iodine excretion. Furthermore, the thyroid size decreased in the iodine-supplemented groups. These effects are exactly what you would expect when supplementing with iodine. In fact, a decreased thyroid size is a good sign as iodine helps improve the architecture of the thyroid gland.

The scientists also studied the thyroid function in the different treatment groups. They found that the subjects treated with higher amounts of iodine had slightly elevated TSH (thyroid stimulating hormone) levels. They termed the subjects who had increased TSH levels as suffering from subclinical hypothyroidism. They concluded, “This study showed that subclinical hypothyroidism appeared in the participants who {ingested 800ug iodine per day}... Thus we caution against a total daily iodine intake that exceeds 800ug/day...” This conclusion is the genesis of media-iodophobia as most people do not read research articles and just read the summary.

The conclusion of the article makes it clear that the researchers were also suffering from iodophobia—medical iodophobia. Medical iodophobia is a term coined by my mentor, Dr. Guy Abraham. Unfortunately, in this case, medical iodophobia leads to media-iodophobia. How did I come up with these diagnoses?

The authors of the study concluded that the slightly elevated TSH confers a diagnosis of subclinical hypothyroidism. Nothing could be further from the truth.

Does iodine cause the TSH to rise? The answer is “yes”. Does the elevated TSH mean the thyroid gland is failing? The answer to this question is “no”. It is well known, or should be well known, that iodine is transported into the cell by a transport molecule known as sodium-iodide symporter (NIS). NIS is stimulated by TSH.(2) Therefore, when iodine

supplementation is begun, one of the first effects seen is a slight elevation of TSH as the body is trying to produce transport molecules (NIS) to move iodine into the cell. After iodine supplementation begins, it is normal and expected for TSH to elevate slightly. I have been lecturing to doctors and lay people alike about this concept for nearly 10 years. In fact, I have written about this important concept in my book, *Iodine: Why You Need It, Why You Can't Live Without It*, 4th Edition.

In this study, subclinical hypothyroidism should not be the correct diagnosis if the other thyroid function tests (T3 and T4 levels) remain normal. In a true hypothyroid condition, TSH will increase and T3 and T4 levels will fall below the reference range.

I have been teaching doctors how to properly use and monitor iodine supplementation in their practice. My experience has shown that many patients do experience a transient increase in TSH levels while maintaining normal levels of the other thyroid hormones—T3 and T4. Furthermore, a vast majority of patients feel significantly better with iodine therapy. In this article, the researchers did not report symptomatic changes with iodine therapy.

The proper conclusion of this study should have read, “This study showed, as expected that iodine therapy resulted in a slightly elevated TSH. This would indicate that the subjects were properly producing NIS in order to transport iodine into the cell. Furthermore, as expected, iodine therapy appeared to improve the architecture of the thyroid gland by decreasing the thyroid gland volume as observed by ultrasonography measurement.”

I have been using iodine effectively in my practice for nearly 10 years. More information about iodine can be found in my book and my newsletters. Please go to www.drbrownstein.com for more information.