

Science AMA Series: We are Drs. James Lee and Jenn Kuo, Endocrine Surgeons, and Dr. Salila Kurra, Endocrinologist, at Columbia University's Thyroid Center. Let's talk thyroid. Ask us anything!

NYThyroidCenter ¹ and r/Science AMAs¹

¹Affiliation not available

April 17, 2023

Abstract

Hi Reddit, We are so happy to be here. It's thyroid awareness week, and we are pretty passionate about it. Let's dive in. The thyroid is one of the most important organs in the body. It is a gland that secretes hormones which control your body's metabolism, and it affects everything from your body temperature to your heart rate to how fast food moves through your GI tract. Problems with the thyroid can include the gland making too much hormone (hyperthyroidism) or too little (hypothyroidism). The thyroid can also be a common site for cancer, and in terms of number new cases, thyroid cancer is one of the fastest growing of all forms of cancer. Fortunately, it is also highly treatable. We are dedicated to providing the best medical care and education to patients with disorders of the thyroid gland, and we work to improve the standard of care for thyroid patients worldwide. Learn more about us here. James Lee, MD: Chief of Endocrine Surgery, Co-Director New York Thyroid Center, Columbia University Medical Center Jenn Kuo, MD: Director of Thyroid Biopsy Program, Director of Endocrine Surgery Research Program, Columbia University Medical Center Salila Kurra, MD: Co-Director of Columbia Adrenal Center, Assistant Professor of Clinical Medicine, Columbia University Medical Center We will answer as many questions as we can starting at 2pm. EDIT: We're here, and Dr. Kuo is on her way from the OR. Let's get started! PROOF Signing as: JL: James Lee JK: Jenn Kuo SK: Salila Kurra EDIT 2: Thanks for all of your insightful questions! This was a blast. We're signing off for now, but hope to come back and answer a few more this evening. JL/JK/SK To continue this conversation you can always tweet at us via @ColumbiaSurgery

[REDDIT](#)

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NYTHYROIDCENTER [R/SCIENCE](#)

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We are dedicated to providing the best medical care and education to patients with disorders of the thyroid gland, and we work to improve the standard of care for thyroid patients worldwide. Learn more about us [here](#).

James Lee, MD: Chief of Endocrine Surgery, Co-Director New York Thyroid Center, Columbia University Medical Center

Jenn Kuo, MD: Director of Thyroid Biopsy Program, Director of Endocrine Surgery Research Program, Columbia University Medical Center

Salila Kurra, MD: Co-Director of Columbia Adrenal Center, Assistant Professor of Clinical Medicine, Columbia University Medical Center

We will answer as many questions as we can starting at 2pm.

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Signing as:

JL: James Lee

JK: Jenn Kuo

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CORRESPONDENCE:

DATE RECEIVED:

May 28, 2016

DOI:

10.15200/winn.146434.49840

ARCHIVED:

People keep recommending desiccated thyroid instead of synthroid. What are your thoughts about desiccated thyroid? Is there any potential *harm* in giving it a test drive for a couple months?

[LudovicoSpecs](#)

Thanks LudovicoSpecs. This is a very important question that has been addressed by a number of thyroid organizations. Here is an excerpt from the American Thyroid Association which does an excellent job answering your question: "Desiccated (dried and powdered) animal thyroid, now mainly obtained from pigs, was the most common form of thyroid therapy before the individual active thyroid

May 27, 2016

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hormones were discovered. People can still buy it over the Internet—legally if it's sold as a food supplement, but illegally if it's sold as a medicine. It is also available still as a prescription. Since pills made from animal thyroid are not purified, they contain hormones and proteins that never exist in the body outside of the thyroid gland. While desiccated thyroid contains both T4 and T3, the balance of T4 and T3 in animals is not the same as in humans, so the hormones in animal thyroid pills aren't necessarily "natural" for the human body. Further, the amounts of both T4 and T3 can vary in every batch of desiccated thyroid, making it harder to keep blood levels right. Finally, even desiccated thyroid pills have chemicals (binders) in them to hold the pill together, so they are not completely "natural". Desiccated animal thyroid is rarely prescribed today, and there is no evidence that desiccated thyroid has any advantage over synthetic T4." [Link to ATA site](#) -SK/JL

Hey guys, thanks for taking the time to do this AMA.

We hear a lot about thyroid conditions being linked to obesity in some cases. What I'm wondering is whether there is much natural variation in thyroid function such that it may be *harder* for some people that others to lose without it necessarily being a diagnostic concern. Is there natural variation in how well thyroids function? Does that natural variation impact weight management?

[ImNotJesus](#)

Great question ImNotJesus. As you know, thyroid hormone helps regulate your metabolism. Usually, hypothyroidism (underactive thyroid) does not account for more than 10 pounds of weight gain. Most of the time that weight gain is due to salt and water retention. This weight gain may resolve when the hypothyroidism is treated. SK/JL

1) How accurate is to say that by suffering an autoimmune thyroid condition (like Hashimoto's thyroiditis) one is more likely to suffer from (an)other autoimmune disease(s)? Is there an increase incidence of other autoimmune diseases in people who are diagnosed with Hashimoto's?

2) To what extent is true (or not) that once you start a regimen with brand-name Levothyroxine, you should not switch to a generic version of Levothyroxine (or the other way)?

Thanks for doing this AMA!

[Bluelizh](#)

Very interesting questions.

1) It is certainly true that people with one autoimmune disease may be at risk for other autoimmune diseases although the magnitude of that risk remains unclear.

2) You can switch between different formulations of levothyroxine including between brand name and generics, however it is important to keep in mind that while the dose on the label may be the same, there may be slight differences in the amount of the actual drug in each formulation. This may lead to slight changes in the amount of thyroid hormone in your blood if you constantly formulations/manufacturers. SK/JL

Is it true that just because even if one's TSH measures within the normal range, one may still have hypothyroidism? I've heard that measuring TSH alone is not always an accurate diagnostic tool.

edit: two words

[carnedelpie](#)

Thanks carnedelpie. TSH is the best screening tool for thyroid function. It is very accurate since most people with hypothyroidism will have an elevated TSH. There are rare instances in which a person may actually have a pituitary problem instead of thyroid disease in which case, the TSH may be normal but he/she still has thyroid dysfunction. Fortunately, this situation is very rare and in the vast majority of cases, the TSH is highly accurate and the best screening tool we have. -SK/JL

When I was a young teen, a thyroid specialist informed me that I had a hyperactive thyroid that was caused by having Graves disease. They suggested I take a radioactive supplement to kill off my thyroid and they wanted me to take hormones for the rest of my life.

That was the last time I went to the doctors about it (my mom's choice), but now that I'm getting older (almost 30 now), I'm curious if this is something I should be more worried about. I feel like my health is pretty fair, but there's always that "what if" in the back of my mind. Are my occasional night sweats, chest pains, super active metabolism normal, or a symptom of a much bigger potential problem on the horizon?

[theonlyepi](#)

Hi theonlyepi. Your symptoms and past history are concerning and you should see a physician for follow-up evaluation. -SK/JL/JK

I'm really happy to see this AMA at a time when I'm just thoroughly confused with my thyroid status (after having been on some form of thyroid medication since a kid...about 18 years)!

I think my ultimate question would be:

What are your thoughts on diet? Are there certain diets that help thyroid levels get to their "good point" naturally? Or at least foods that can help to combat the symptoms of hypothyroidism? Even though I've been on Levothyroxine (150 MCG for probably about 10 years now - I'm 30) , I still feel major symptoms. I also had my dosage upped for about two months (175 MCG) by my RE and they just brought it back down - I felt no symptom change while taking the higher dose.

Thanks in advance!!

[Adkgirl85](#)

Great question Adkgirl85. In general, there are no data that shows that diet can improve thyroid function. However, it's important to maintain a healthy diet for your overall health.

SK/JL

do you monitor the vocal cord nerve (recurrent laryngeal) during thyroid surgery? What is the rate of nerve injury in current times with monitoring?

[liberty4u2](#)

Hi Liberty4u2, thanks for your great question. Whether or not a surgeon uses some form of nerve monitoring device depends primarily on how they were trained and their preference. The most important factor that influences the nerve injury rate is the experience of the surgeon. There is excellent data that shows the rate of all complications is dependent on the number of thyroid operations the surgeon does per year. In the hands of a very experienced surgeon, the complication rates are very low and the rate of nerve injury is the same whether or not a nerve monitoring device is used.-SK/JL

I've heard that thyroid tests are not that accurate, and that you really need four of them to get a good idea of what's going on. Is this true? How often should they be done? Thank you for AMAing!

[onlyateacher](#)

Thanks for your question onlyateacher. TSH is the best screening tool for thyroid function and is highly accurate. If the level is abnormal, it should be repeated to confirm the abnormality. -SK/JL

Is it crazy-talk to consider a 20-30's aged male to have a thyroid problem?

[FromThatOtherPlace](#)

Hi FromThatOtherPlace. Not crazy-talk at all. While thyroid disease is more common in women, it can also be seen in men of any age. -SK/JL/JK

Hi,

Thanks for doing this important AMA. Can you please provide some insight into why a doctor may refer patients with Hashimoto thyroiditis or Graves' disease for thyroid ultrasound? These are clinical/laboratory diagnoses and so I am unsure of the role of imaging.

[momentousdetail](#)

Great question momentousdetail. You are right that both Hashimoto's and Graves' disease are diagnoses primarily made by lab/clinical exam. Ultrasound and imaging can help support the diagnosis. In addition, the ultrasound will tell you how large the thyroid is and whether or not there are nodules which may need to be evaluated.

-SK/JL

What would you recommend for an iodine supplement or natural way of attaining iodine?

And how much does iodine affect thyroid function?

How much is too much?

[Soulforgold](#)

Great question Soulforgold. Iodine can be found in many foods including seafood, dairy products, and meat. Much of the table salt in the US is supplemented with iodine and this can be a good way of getting enough iodine in the diet unless you have reasons to restrict the amount of salt in your diet. Multivitamins also may contain supplemental iodine. -SK/JL

What is the relationship between thyroid function and cholesterol levels? I have heard that hypothyroidism may be related to elevated cholesterol levels, but the biochemical connection isn't clear to me.

[nate](#)

Great question, nate. Hypothyroidism can be associated with high cholesterol levels, specifically LDL (the "bad cholesterol"). This is because there are fewer receptors on cells for LDL when someone is

hypothyroid. -SK/JL/JK

How accurate is a TSH test alone in diagnosing a hypothyroidism?

When my doctor was diagnosing me for general fatigue, he only checked my TSH, and flat out refused to check my T3 and T4 levels (I asked). According to him, my TSH results indicated hypothyroidism, and I am now taking Synthroid pills.

It was only after I started taking the pills that he had my T3 and T4 levels checked, and they were fine.

[khendron](#)

Great question! TSH is the best screening tool for thyroid function. It is very accurate since most people with hypothyroidism will have an elevated TSH. -SK/JL

I'll try to keep it short and sweet:

Pharmacy student here, working mostly in the community setting. How do you feel about the various thyroid replacement therapies, specifically the differences between desiccated thyroid(armour) and synthetic (levothyroxine)? Any tips for discussing these treatments with the patients?

In community practice, this question comes up MUCH more frequently than you'd think. Thanks in advance!

[jimt123](#)

Thanks jimt123. We had some similar questions earlier. Please take a look at our earlier responses on this topic. SK/JL/JK

Hi Drs!

Fairly specific question from a case I've seen. In Graves' disease after a complete thyroidectomy, the TRAbs remained high and the ophthalmopathy persisted. Can this be explained by continuing off-target binding of the antibody in the eye?

[swimfast58](#)

Very interesting question swimfast58. Yes, the antibody levels can remain elevated and have effects on thyroid eye disease even after thyroidectomy. This often gets better as time passes. -SK/JL/JK