Bipolar or Thyroid? The Misdiagnosis Costing Women Their Health With Sara Russell Transcript

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Introduction to thyroid and mental health

Welcome to the Thyroid Pharmacist Healing Conversations podcast. I'm your host, Dr. Isabella Wentz, your thyroid pharmacist. For the average person, it takes about a decade to get diagnosed with a thyroid condition, yet many of us struggle with the whole variety of symptoms.

A lot of these symptoms can actually land us in the office of a psychiatrist instead of the Office of perhaps an endocrinologist who might actually look at what's going on with our bodies.

In today's episode of thyroid pharmacist healing conversations, we're going to be exploring the connection between bipolar disorder, thyroid disease, and we are also going get into postpartum mental health.

Today I'm joined by Sarah Russell, a functional nutritional therapy practitioner who works with clients all over the world. She actually speaks, is it six languages?

No, three, but I read about six. Yeah. She is an expert in mental health in women. She's the co-creator of Masterclass, What You Never Learn About Blood Work During Preconception, Pregnancy, and Postpartum.

And she covers the physiology of pregnancy, how it affects blood work patterns during each trimester of the pregnancy and the postpartums period. She is a clinician as well as a mentor to other practitioners who are looking for a client centric approach to look for root causes.

Now, Sarah, it's so wonderful to have you here with us today. I know mental health is such an important topic. And in my experience, a lot of times what's been very challenging for myself personally, as well as my clients, is that people oftentimes are given a mental-health diagnosis.

without really considering their thyroid function and thyroid autoimmunity can have such a huge, huge impact on mental health. It can also be mistaken for another diagnosis.

Absolutely, yes. So technically, the differential diagnosis process for bipolar disorder should involve ruling out diseases, conditions, and even medications that can cause the same symptoms that are seen in bipolar disorders.

And these include autoimmune thyroid disease, both hypo and hyper. Also, it is known that hypothyroidism, even non-autoimmune, can can be associated with bipolar disorder and or bipolar symptoms without the actual disorder being present.

So it is extraordinarily unfortunate though that in reality what I see in the clients that I work with is that this process was not conducted during the original diagnostic workup.

What will happen a lot of the time is somebody will present to psychiatry for the first time during an acute manic or hypomanic episode where the patient is hospitalized and in the chaos of the situation, nobody really thinks to run blood work.

or to do a really thorough job of finding out information from the client. One of the things that my clients tell me once they have received a bipolar disorder diagnosis is that they stop being credible.

to their medical team. And this applies to both clients in the US and clients here in Italy and in other countries that I've worked with. So it's not just an American bias.

It's kind of like an all over the world. it is very unfortunate because it makes it hard for people to get diagnosed accurately in first place. There's a third confounding thread which overlaps with both the risk for bipolar disorder and autoimmune thyroid disease, which is celiac disease and also possibly non-celiac gluten sensitivity.

Although I do suspect that a lot of the time what is labeled as non celia gluten-sensitivity is seronegative celiac disease which actually fairly common from the studies that have investigated it.

So I think that sometimes you just have to be a little bit skeptical about the nonceliac gluten sensitivity, especially when we see case studies that are published on topics such as, you know, there was this, I'm sure you saw this paper published about this 14 year old girl who presented with gluten-induced psychosis and she had Hashimoto's thyroiditis, but they had ruled out celiac disease through antibody testing.

But I read her case and I thought, gosh, I would be so surprised if they did an actual biopsy if she were not actually celia. because her symptoms were just so incredibly celiac-ish, very autoimmune.

So, yeah. Yeah, it's just crazy to think about.

Bipolar disorder, thyroid disease, and celiac overlap

I know I used to actually work in mental health a lot of when I finished with pharmacy school, I wanted to specialize and become a psychiatric pharmacist.

And so around the same time I got my Hashimoto's diagnosis, and I remember working on a few different cases. There was one woman who kind of had a lots of ups and downs.

in her life and I did like a really comprehensive chart review for her over the last 20 years having access to all of her medical records and it was like she was she, was doing well actually now she.

Was depressed and this woman was obese and she on a lot of different medications and so I was usually called in when a person was on polypharmacy but a.

Lot of psychiatric medications that she just wasn't responding to And looking through her chart, I realized that during one of her hospitalizations, somebody took her off of thyroid hormone.

And this was a thyroid patient that had, you know, kind of did a graph of per psychiatric symptoms to her dosage of five minutes. And it was a correlation there.

I was like, wow, she tends to be depressed when she's not on thyroid hormones. And at that time, I Was newly diagnosed with hypothyroidism, and I had learned about it in school, but it Was just very much on my radar, right?

And this was kind of like one of the first really interesting situations where Iwas like is it always mental health, Right? Because once she was able to get on the thyroid Hormones, her mental Health stabilized, And then Ihad another client who was Living in a group home and she had a prior diagnosis.

I want to say it was like schizophrenia or schizoaffective or bipolar disorder, something that you don't necessarily like grow out of or something what you you know, take an antibiotic for and it goes away and she was diagnosed with celiac disease and having gone gluten-free, a lot of her mental symptoms started to vanish.

She was tapered off of medications and was really thriving and there was like, you now, with some time, obviously it didn't happen overnight, but she is thriving in the community without any mental health issues.

Now, it's really, really I think underappreciated the intimate connection that the thyroid can have on our mental health, but it makes sense, especially with bipolar disorder, because when we think of when have an underactive thyroid, that could be the depression part.

When we have and overactive, thyroid that can make us kind of manic and a lot of people potentially in the first five to 10 years of Hashimoto's they're going to be presenting with kind of ups and downs in thyroid function.

I saw a study about rapid cycling bipolar disorder and the higher incidence of Hashimoto's antibodies. And I'm curious in your experience working with people with bipolar disorders, how relevant is thyroid disease?

Well, you know, first of all, the Incidence of thyroid disease is very common in the same sort of phenotype that tends to get diagnosed with bipolar disorder.

And what happens a lot of the time is these people, unfortunately, fall through the cracks. So we might never know because then they get put on, you know, a lotta the times they put it on lithium carbonate, which further destabilizes thyroid function.

But because they didn't have a baseline, because nobody ever measured their antibodies beforehand, nobody even really looked at TSH and T4 and t3, which is absolutely shocking.

I mean, how can you even give somebody a bipolar diagnosis without looking at those things beforehand? Or prescribed lithium carbonate, quite frankly, without getting a base line reading for these things.

You know, so the, the scientific literature and the case study literature that has been published in PubMed is far, far ahead of actual clinical practice.

And I think that part of that is just because once a patient presents with symptoms of being out of control. And we're talking about, you know, psychosis, because a lot of the time, not everybody who has bipolar disorder, or not, everybody, who hasn't autoimmune thyroid disease has psychoses, but psychose is much more prevalent in this population.

So, and also in celiac patients. There are overlapping threads that tie all three of these conditions together. Having one might make it more likely that you have at least one of the others, but also having one could actually lead you to be not diagnosed in that condition and slip through the cracks of a diagnosis that is your root cause of condition.

but then you're treated for something entirely different. Hashimoto's encephalitis can cause bipolar symptoms. It can causes psychosis. Gluten consumption has been known from the 1950s to cause all kinds of psychiatric disturbances, including psychoses.

People who have a celiac diagnosis are 10 times more likely to be diagnosed with bipolar disorder than the general population, which is a lot. Or maybe I'm remembering that backwards.

It might be that people with Bipolar Disorder are 10 times more likely to have celiac disease than general populations. But then also insulin resistance is very common in people who have bipolar disorders, 50 percent.

of people with bipolar disorder are insulin resistant. And so if you take people who say have underlying celiac disease and they're finally diagnosed with it, what happens?

They go on this diet where they, you know, the standard Western diet, where are just replacing wheat-based foods with ultra-processed, extraordinarily high glycemic index foods that are much worse for your gut flora than the original version was.

So on the one hand, you're being helped because you are not needing gluten. But if you just replacing your former diet with ultraprocessed foods, then your insulin resistance is going to get much worst.

your gut microbial balance is going to get much worse. And if you have an autoimmune disease of any kind, including celiac disease, that's not good for you.

If you a thyroid condition, there's some very, very interesting emerging research being done. on how the gut

microbiota and specific strains affect both Graves' disease and Hashimoto's in different ways.

Even subtle changes in diet, the more ultra-processed diet is, lower in fiber, and the lower antioxidants, polyphenols, all these things that are so good for lowering inflammation.

These things help mental health, they help thyroid, immune balance, everything. It can be very hard to tease apart diagnostically exactly what someone has if the original diagnostic workup was not thorough enough.

And it often, unfortunately, is not when somebody presents with psychiatric symptoms. I think that we're seeing sort of a little microcosm of this in the postpartum psychosis population, where a lot of it is being attributed to bipolar.

But it's hard to tease apart when you look at the actual case studies and In clinical presentation, it's really hard to say where true bipolar disorder begins and postpartum thyroiditis ends and vice versa.

It's very hard tease them apart. You make so many great points here. Something to unpack, the gluten-free diet is one of the most helpful interventions that I have found for autoimmune thyroid disease.

And the second most helpful is going to be blood sugar balance. Now I could speak from my experience. When I first went gluten-free, I started the gluten free junk food diet.

So I was eating rice cereal with rice milk for breakfast. A lot of my symptoms actually did improve. I had IBS, acid reflux that went away, but all of a sudden I found myself with higher levels of anxiety.

And this can happen with increased thyroid antibodies. So I was measuring my thyroid, antibodies all the time. And I Was like, part of me feels so much better.

But why do I have higher antibodies? And at that point, I kind of started to really focus on blood sugar balance. my level of, like, calmness and mental stability.

I have had clients that have gone through some of my programs, my adrenal program, where we really focus on blood sugar balance. It focuses on fatigue and brain fog.

And people are like wow, I never knew I could be so calm with blood-sugar balance! It's just one of the things that I don't think we There's foundations to that.

I'm a big proponent of more protein and more fat than the standard Western diet. Less processed foods, less carbohydrates, and everybody's going to have their unique balance of what they need to modify, perhaps adding more fiber in.

But this is something that's absolutely game-changing, really, helpful. For some people, this can mean they no longer need psychiatric meds that come with a whole host of side effects.

You had mentioned lithium and connection with thyroid disease. When I was in pharmacy school, it was like, somebody's on lithium, you need to monitor their kidney function, thyroid function.

Kidney function type of function and this was much like a exam test that we had to take. But then I got into the real world and I would ask psychiatrists if this ever done and they were like what?

No, or the primary care doctors. And so a big part of my job was making sure that things were just being monitored, that they were supposed to be monitored.

Can we get a little bit of that lithium thyroid issue that you see? Yeah, yeah, absolutely. So I do want to go back just a bit to what you were saying.

In clinical practice, patients are not monitored spontaneously by their psychiatrists or primary care doctors as much

as they should be. I'm the person who's almost always telling the bipolar patient, please ask for a thyroid panel.

Lithium, monitoring, and medication interactions

Please ask your kidney markers to be checked. Look at your homocysteine. Homocystine is so important. Your fasting glucose, hemoglobin A1C, fasting insulin.

I mean, it makes such a huge difference because keeping these things, keeping an eye on these markers is important that the population, unfortunately, this population is not valued enough.

It's terrible. Almost as if they were sub-humans to the medical professions who are entrusted with their mental well-being. I mean, I have this outstandingly wonderful bipolar client who also happens to be a friend who lives nearby.

I actually knew him both before he was diagnosed with bipolar, during the process of his diagnosis, and after. I watched the process, but I have seen him go through all kinds of experiences from starting on this journey of polypharmacy.

I was the person who kept advocating for him to get the appropriate lab testing run. He got his first thyroid panel of his entire life about three months after he was diagnosed with bipolar disorder and put on lithium carbonate.

at which point he was diagnosed with hypothyroidism. And I said, well, it would have been very helpful for us to have known beforehand. But when he in the hospital, there was absolutely no way that they were going to run a thyroid panel on him.

He was sedated and nobody was listening to me at that point. I was just a friend visiting him in a hospital. But even afterwards, it was my tireless advocacy that got him the markers that he needed.

Also, another thing that can sometimes happen when you're on polypharmacy is you start having side effects that require other medications. So, I'm going to share a little bit more from his clinical case because I think it's It really can happen to a lot of people.

The first thing that happened is he developed hypothyroidism and started being treated for that. A few months later, he started developing high blood pressure.

His primary care doctor prescribed a medication. I can't remember right now what the name of the medication is. But I did, so he sent me the picture of the medication before getting it from the pharmacy.

He said, Hey, Sarah, this is what my doctor prescribed for my high blood pressure. Could you just check? This is okay for me. And I checked and I was like, Oh my God, you cannot take this.

please tell your doctor, like I sent him 12 links to different PubMed articles that talked about potentially lethal and in some cases there had been actual lethal cases of kidney damage because of the way, the immediate thought I had was blood pressure and bipolar.

You want to make sure that whatever medication the person is being put on is how that's being processed in the kidneys and how affects the kidney excretion and blood concentration of lithium, because these are not neutral things.

Anyway, what happened is he got in touch with his primary care physician, asked for a different medication, sent her the email of all the PubMed links of the case studies, and she said, oh, don't worry, that's fine.

He said I don t know who to believe. I said ask your psychiatrist and he did. And he said tell your friend she probably saved your life. And he changed doctors, but it is not an uncommon thing for doctors to be dismissive of their patients with these major mental health diagnosis.

And it makes me very, very upset because you do not stop being a valuable, intelligent human being. who is worth taking care of. I mean, your psychiatrist may be saving you from the incredibly high suicidal risk that comes with bipolar disorder, but you can't do that at the expense of putting them on a combination of medication that risks having them die of lithium toxicity because you didn't check the drug interactions.

This is unconscionable. Yeah, I mean, like I'm guessing that the drugs he was prescribed were ACE inhibitors. And this is like a very. Yeah. I can't remember which one, but yes.

Yeah, this is like a very like red flag clinical interaction that I would I were to fill the person's prescription as a pharmacist, then I will call the doctor.

I don't know what the system is, like in Italy, but in the United States that would have to go through the pharmacists or a consulting pharmacism. If you were at a hospital would be the one usually kind of catching that drug interaction.

And oftentimes patients might get samples from their doctor or they might be using two different pharmacies. And sometimes that can actually be missed and it can be quite dangerous.

I know that it was wonderful that this psychiatrist actually was looking out for this. almost like separating the body from the head, right? And they were like, Oh, there was a medication somebody was on called effects or which can really impact the person's blood pressure.

And that's like a really big monitoring. that were always recommended. And I remember this person got put on effects or for their depression, and then they had high blood pressure.

Then they have to get on a blood-pressure medicine. I called the psychiatrist and I said, hey, are you seeing a lot of your effects for patients with their blood pressures going up?

And he was like, oh, I don't check their blood pressure. It's not even on my radar. And it's like an old prescribing cascade where one drug causes this, and it can cause a lot of different issues where sometimes if you can get to the initial root cause of what caused the symptoms in the first place, or even just more careful drug selection can avoid all of that.

In your friend's case, he could have had lithium toxicity, which is very, very serious. when having those two drugs taken together. You mentioned serum negative celiac disease.

I don't think a lot of people know what that is and they don t really know how to screen for that. Can you tell us a little bit more about that? Yeah.

So it is when you have negative antibodies, And, you know, so the correct way of testing celiac antibodies is you do need to actually consume gluten containing foods for a time period before testing.

Now, I've seen conflicting information on how long that time. Period is. When I spoke with an experienced gastroenterologist who works with a lot of celiac patients, and I asked her, what do you think about this?

There's so much conflicting information in the literature, she said two months. She said too many people fall through the cracks. Nonetheless, even consuming, in Italy, people eat so that most doctors won't even ask their patients before they run antibodies if their patient is consuming gluten regularly.

It's just taken for granted that everybody does unless they have a celiac disease diagnosis already. But nonetheless, once a person's antibodies come back negative, there is still a chance they do have celia disease just with negative antibodies.

So the testing is very invasive, just because a small intestinal biopsy is kind of a big deal. But most patients and doctors will not necessarily press to move forward with a smaller intestinial biopsies to check if the antibodies have

come back negative.

It's too bad that it doesn't happen more often because in the studies that have investigated this, in patients who have family history of celiac disease with symptoms, who had then tested negative to the antibodies and moved on to next stage of the small intestinal biopsy, the degree of villus atrophy that is seen with a MarS score that it's consistent with the celiac disease diagnosis, it does occur in a certain percentage of cases.

So a lot of people are falling through the diagnostic cracks if they're not following up and these are the people who are called serum negative. And this also occurs in other autoimmune conditions like Hashimoto's and even lupus.

Yeah, there's definitely serum-negative Hashimoto's. And I always tell people, like, if you have hypothyroidism, then there is a really good chance that you might actually have Hashimottos, even if don't have the antibodies, because there are so many different types of antibodies.

It's something that could still be seen on a thyroid ultrasound or even doing a biopsy. Absolutely. It's funny, you know, I feel like the medical care system is much better at remembering the value of a thyroid ultrasound, even in a patient who doesn't have positive antibodies, than they are at taking care of, the thyroid testing needs of people who present with bipolar symptoms.

It is very kind of weird. I don't know if you've seen that sort of in the people that you talk to as well. Yeah, I'm curious, what actually got you interested in bipolar disorder?

Well, you know, a lot of things. known a lot of people with bipolar disorder. It's interesting, you know, when I was a teenager, I would sit around with my sister and we would listen to songs like Nirvana's Lithium.

And I remember just being fascinated, but we also listen, to other songs that would describe or recount mental illness in some way. found myself interacting with people that I find interesting, who I guess I have a higher concentration of friends and acquaintances who sort of fall on the bipolar spectrum than the average person.

So I've developed actually a clinical passion for it because of the people I know who struggle with it. That's fascinating. It's like, sometimes you see something come on your radar and you realize that people perhaps are not getting the care that they need.

And you start making some of these dots. You can't not speak it. So I'm so grateful that you are doing this advocacy work and helping people.

Seronegative celiac disease and diagnostic gaps

Because like you said, I think people with mental health disorders, they're almost put into this bucket where they are no longer trustworthy in the medical system.

And it's like everything from them being hungry, from that being tired to them, being, you know, symptoms like hair loss are even discounted as part of your mental health issue, where it is like, to me, it s like okay, so if you have cold intolerance and hair lost, that's a red flag for me that you've got a thyroid disorder, and you're also depressed, but they're only focusing on your depression, or, You know you, have anxiety, quote unquote, we also have gut issues, and you also have these palpitations, that actually could be a thyroid disorder.

There's something going beneath the surface, and we can't just mask it with psychiatric drugs. When I was in undergrad, I had a I had an infection, likely mono, and I woke up one day after like 14 hours of sleep, missing my exam, having laid down at like 3pm the previous day, I was like, what is going on with me?

And so that kind of continued to the point where I got home from college and my mom was, like why are you sleeping all the time? What's wrong with you?

I'm just exhausted, I am having trouble with making decisions, and I feel depressed. I sent a different kid off to

college, who are to her credit, she sent me to a psychologist and who then diagnosed me with depression.

And then I was like going down the psychology route, but I had like looking at pictures of myself, I was sharing before the interview, have been really reflecting on my younger years.

And now that I'm pregnant with a little girl, and I've been looking pictures with myself from my freshman year in college and my thyroid gland is so swollen.

It's like, we I had thyroiditis, And I wasn't tested for that. For many, many years, it probably took like from that point, I think 18 until I was tested, had elevated thyroid antibodies at like 25 or 26, but nobody really thought they were relevant.

And so I didn't know. I thought there was something wrong with me. Why am I so tired? It must be depression, right? That's kind of the label that I Eventually, I kind of learned to cope with the fatigue.

And so I just studied all the time and just really tried to cook with that. Like fatigue was definitely the biggest symptom that I had. They thought that the fatigued came from depression, but it was like, you know, that was depressed because, or I was feeling sad because I wasn't doing well in school, and I couldn't do anything, right?

So this is something, as you can tell, I'm very, very passionate about as well, personally having clients that have gone through it. But not a lot of times people know that they have bipolar disorder.

And what is the implications of that? What is that overall incidence of bipolar disorder? And can you walk through some of the symptoms? Yeah. So the overall incidents of Bipolar Disorder is about 3%. And that is pretty standard across different regions and cultures where Western medicine is prevalent.

So there aren't huge genetic variations, although there are certain genetic variants that can affect bipolar incidence. For example, MTHFR issues are seen and also they definitely are manifesting symptomatically in the bipolar population in a higher prevalence compared to the baseline population.

And there's some very interesting work that is done on homocysteine levels in mental illness in general. So that's a very interested area for people to look at if you're interested in that overlap of mental health and lab markers.

So there are two main ways to fall through the diagnostic cracks of bipolar disorder. And one of them is you don't necessarily seek care if you're manic or hypomanic because you feel great.

It's just pretty amazing, you know, your thriving on not very much sleep. You're feeling really productive. Maybe you are getting a lot done. Your socializing, You feel like you do not even really need to eat very Why would you go in and get help?

It's tremendously empowering in a way. That's how it feels. But then when you have a depression episode, that might be when when end up getting help. Then what happens a lot of the time is you just get a major depressive disorder diagnosis because you don't report that you've also had mood swings.

People can fall through the diagnostic cracks that way, And sometimes people will present, like I was saying earlier, because they have a psychotic episode.

A lot of the time people have psychotics as part of a manic episode, Technically, so there are different types of bipolar disorder. There's bipolar 1, bipolar 2, and bipolar 3, which is also sometimes called psychothymia, but bipolar one is technically the only one where psychosis can be present.

But I have seen a lot of people with bipolar two diagnoses who have had psychotic features. So it's a little bit messy. I mean, I talked with a psychiatrist who is following my friend for bipolar disorder, and she told me that bipolar disorders is a very hard condition to diagnose.

She said, yes, on the one hand, the symptoms are very stereotypically clear cut. You look at the DSM. But it's easy to overdiagnose it. It's easier to miss differential diagnoses, and it is easy underdiagnoze it, so there are all kinds of reasons, including clinical bias, why somebody could be incorrectly diagnosed or not diagnosed with it or something else instead.

That makes sense. And it's like, well, so we kind of talked about how some of those people. could have a thyroid issue and could thyroid antibodies. And I know I just pulled up a study and it says that rapid cycling bipolar disorder is associated with anti-thyroid antibodies instead of thyroid dysfunction, where I feel like a lot of times clinicians might overly focus on what's your thyroid hormone status.

Do you have ESH? Are you underactive? are you overacting? And these things could actually contribute to mood, but a lot of times the thyroid antibodies are not appreciated in their role in how they affect us.

Just having thyroid antibiotics alone can really impact a person's a person's like fertility, their fatigue, and definitely it can impact their mental health issues.

So something that the researchers concluded, I believe this was the British. Which journal was it here? BMC Psychiatry. And their conclusion was that thyroid antibodies, specifically TPO's, may be treated as a biomarker for rapid cycling bipolar disorder because they were so frequently found in those patients.

What's been your experience when you have a person come to you with a bipolar diagnosis? I don't know if you've done formal analytics, but how many of them are having thyroid antibodies or alterations in thyroid hormone levels and or both?

It depends. Sometimes the medical team will refuse to run antibodies outright. It's extraordinarily frustrating. So especially in states or countries where the physician has to order the lab testing, it's just almost impossible.

And sometimes, depending on the state of a person's mental health, they may or may not be You know, in a state where they are able to follow up and and self order in those areas where?

They can. So, unfortunately, there is a bit of a limitation. I wish I could give you more information on the antibodies. One of the things that I can say is, I, wish, had more.

Bipolar symptoms, antibodies, and lab testing

But in terms of, you know. and T4, which are the ones that pretty much every one of my bipolar clients I have seen. Unfortunately, it can be a chicken and the egg problem because a lot of the time they have been on lithium carbonate for months to years before they even come to me.

It's not surprising because of that way that lithium-carbonate at pharmacological doses impacts the uptake of iodine into the thyroid tissue, which can affect the production of thyroid hormone.

Unfortunately, we don't really know if they had a pre-existing thyroid condition, which is so frustrating because of the importance of doing that differential diagnosis.

Unfortunately, I wish, first of all, that medical teams would systematically apply standard guidelines and really apply them thoroughly, not just think of them as prescriptive guidelines that you can take or leave as you please in clinical practice, but that there is a proper thorough differential diagnosis conducted.

And then, you know, there's probably just an overlap where, on the one hand, yes, sometimes people are misdiagnosed with bipolar when they actually just have a thyroid condition.

Sometimes people who are missed diagnosed with Bipolar Disorder or just, psychosis, schizophrenia, when just they have celiac disease. But you could have all three of those conditions or two of them.

All at the same time, of course, relieving celiac disease, if you have that, will help relieve everything else that you. Because it really does affect everything, malabsorption alone has a huge impact on everything.

But even the autoimmune dynamic has. A huge. Impact on all the other auto immune dynamics in the body. So, sometimes these conditions coexist, and sometimes they're just, you know, one condition is missed while the other one is misdiagnosed.

So sometimes there's a mutually exclusive situation where the wrong diagnosis is applied, And sometimes, there is an overlap. Where of different conditions, but only 1 of 2 or 2 of 3 or 1, of three will be actually diagnosed, which makes treatment difficult.

And then the side effects of medications can make. treatment even harder in some cases, especially if the diagnostic process was incomplete. One very interesting study that was done on a very large cohort of pregnant women, they actually set out to look at both hypothyroidism and hyperthyroidist in pregnant woman and look their offsprings, mental health.

But there were not enough women with Graves' disease in the sample, so that ended up not being looked at in The Ultimate Study that was published. But what they found was that those women who had hypothyroxenemia, they had normal TSH but low T4 in their pregnancies, those fetuses that were exposed to maternal hypathyroxyemia had a five times as likely chance of having bipolar disorder with psychotic features, especially the girls.

So the question is, gosh, what's going on here? Does low maternal levels of T4 pass on then in utero to the fetus? And of course, the question is, how many of those women had antibodies that were affecting fetal development?

How does that affect the neuropsychiatric development of the fetus? These are all open questions. But then of, course there's the questions of to what extent is the psychiatric symptom picture in the offspring in turn potentially contributed to by thyroid dysfunction.

But there's probably some overlap between hypothyroidism, autoimmune thyroid disease, celiac disease and bipolar susceptibility. Even if you look at the the way that gluten sensitivity, especially in celiac disease, affects nutrients and immune function.

It's easy enough to see how all of those things can happen in one person. Yeah, it's something important key consideration that you bring up is some people can have bipolar diagnosis when it truly actually just a thyroid condition.

And once they get their thyroid properly managed, that diagnosis can go away. Sometimes you can even have a bipolar. Diagnosis. and it's actually just celiac disease, and the bipolar diagnosis can go away, sometimes the thyroid diagnosis goes away when you have a gluten-free diet and you address the celiac disease.

And then there's other instances when a person might have bipolar disorder and they might celic disease and a thyroid condition and these other issues, but actually treating the co-occurring issues can make the bipolar disorder better.

Is that right? Can you speak to that a little bit? What can happen? If a person has, say, the triad of autoimmune thyroid disease, celiac disease and bipolar disorders, that person can get away with being on a lot less medications, both dosage and numbers of medications.

If you're concurrently treating The underlying celiac disease helps clean the slate so much. You're just properly absorbing your B12. You are absorbing fat, so you're getting your omega-3 fatty acids.

Especially EPA is a fraction in omega 3 that is so important for mental health and psychiatric well-being. Your getting vitamins A and D. Those are both good for neuropsychiatric function, immune health, they're immunostabilizing.

They're good lowering things like depression. Good for all kinds of stuff. just treating celiac disease with an appropriate high-fiber, colorful diet that is sufficient in protein and has enough fat-soluble vitamins and omega-3s, they're not processed food diets, but those can make such a big difference.

to just to the development and the course of the person's neuropsychiatric functioning as well as their thyroid health. So I know that you're such a big proponent of things like selenium.

These are just incredibly important in physical health and mental health, regardless of whether a person has a diagnosed thyroid condition. Certainly, when these things co-occur, being aware that if someone has one, two or three of these different commonly co-occurring conditions.

And by the way, you know, if we wanted to expand the conversation, sometimes another condition that can co occur with, in this sort of bipolar population is lupus.

That is fairly common and I do think that that might also come with a higher expression of autoimmune thyroid disease, although that's not something I have looked at necessarily, but certainly I've seen the triad of lupus, bipolar, and celiac disease present together in more than one person.

Yeah, I mean, if you're catching the full spectrum of the situation that, you know, of conditions that the person has, and you have a better chance of optimizing their outcomes and limiting the polypharmacy with the side effects and the concomitant organ damage and nutrient efficiency.

So, for example, People who have bipolar disorder, a lot of the time have high homocysteine and low B12 and folate and often low V6. These nutrient deficiencies contribute to poor mental health outcomes.

Yet, when people get put on certain medications like valproic acid, that can actually raise homocysine by suppressing B-12. Valproic acid also suppresses the levels of vitamin D in a number of nutrients.

It has numerous nutrient interactions. Being aware of that can be really helpful because then you're running those markers. You're optimizing the person's blood sugar.

You're looking at their hemoglobin A1c, their insulin resistance. We're really talking about populations where there can be unstable immune function, increased inflammation, and increased oxidative stress.

and leaky barriers. So, difficulty controlling levels of substances, levels nutrients, the influx of nutrients into cells, permeability of cell membranes.

These things can all have an impact, and the more accurate and complete the diagnosis is, better the outcome is for the patient. So if you had somebody that was diagnosed with a bipolar disorder, what you would recommend for them is to actually do a little bit more testing when they're stable.

So what I'm hearing is testing for potentially homocysteine and the MTHFR mutation. Testing for thyroid antibodies, testing it for TSH, and testing first celiac disease.

I know I am a big proponent of companies like Alta lab and Rupa lab that allow people to self order their tests in the United States because I believe we should all have access to that critical information and a lot of times you can get.

the tests for pennies on the dollar when you private pay versus go through insurance. You can also ask your physician. That's always a great place to start, and you also want to be empowered to understand your own lab tests.

And then you're also advocating for monitoring people. If they are on psychiatric meds, you would want them to test for side effects, And you, would also look at how are those impacting their nutrient levels?

So we can, also test, for B12 levels. Oh yeah, absolutely. B12 and folate are really, really important in this

population. And folates, I think we mentioned homocysteine.

I know spartanatine is a really nutrient for thyroid function, and that can get depleted by valproic acid. Lithium can also deplete myoinositol, which is a super, super important nutrient, for thyroid function.

I haven't seen any studies of people using myoinositols to correct lithium-induced thyroid dysfunction, but I'd be really interested to see if that could actually help, because the mechanism of action makes sense.

to me from a pharmacology standpoint, but definitely low myoinositol is associated with, you can't really measure it, it is really associated things like insulin resistance.

Oh yeah, absolutely. This is something that I think about so much because the risk of having these metabolic dysfunctions that deplete myonositols It is so common in this population.

Absolutely.

Pregnancy, fertility, and medication considerations

I'm really glad that you brought that up because just adjusting people's inocital levels, if you're working with women who are trying to conceive or who lactating or women with PCOS, With insulin resistance, then using a product that has myoinositol and dekyronositols at a 40 to 1 ratio is super helpful.

It's a very easy thing that you can do. But it's the myoinositole that helps with the potential lithium interactions for sure and with underlying insulin issues.

So potentially going gluten-free would be an important consideration if you've been diagnosed with bipolar disorder, definitely test for celiac disease.

Sometimes people with Hashimoto's, I'm like, even if your celia negative, why don't you just try going through a gluten free diet that can sometimes help?

And then you advocate for fish oils, is that right? Or can you do some of the other things you might recommend for a person? Yeah, so definitely a high quality bee complex or high-quality multi that is You know, appropriate for their I look at so many things.

I looked at as many nutrient levels as possible, including vitamin D. That's really, really important. Like to see vitamin B6 and retinol, which I know are not common blood tests run, but they are really.

For, you know overall, like mental health and immunomodulation. So I do like to those, even though sometimes it does mean investing a little more money.

But. So those, and if somebody comes to you with a bipolar diagnosis, prevalently, the fish oil or omega-3 supplements should be EPA dominant. It's not like DHA is not good for you or will set you back, but it's the EPA fraction that is most beneficial to those symptoms.

That's interesting and that's good to know because there's different ones on the market and I know some people just go to like whatever is that Costco or whatever that Walmart, but when I like the labels matter and the quality and sometimes the makeup of the supplement matter for there.

You're going to make expensive P or whether you're actually going have a needle moving effect with your health, right? Yeah, I also am very strongly advocating that people who are taking fish oil supplements are on or taking enough vitamin E in their multi.

to help them with the antioxidant component of it. You don't really want those oils rancidifying. Most people are not getting enough vitamin E from their diet.

I really do try to get people who can eat nuts and seeds every day to eat some nuts or seeds, but not everybody can and not everyone remembers. With bipolar people now, eating disorders are very common.

Disordered eating, either binge eating or Just going through periods of not eating much, you know, sometimes according with the mood cycling tendencies and you any kind of poorly controlled insulin resistance, hypoglycemia, or hyperglycemias can amplify those disordered eating patterns.

I wouldn't necessarily count on the fact that a person with a bipolar diagnosis is going to be really, really consistent with their intake of nuts and seeds.

Most of my non-bipolar clients aren't. Yeah, I just want to protective of their antioxidant status. That's really fascinating. With the vitamin E and eating nuts and seeds, like I have a little bit of a personal anecdote.

So a lot of people with thyroid issues do have vitamin B deficiencies. And this was something that I addressed early on, on my healing journey. Then a few years ago, I was diagnosed with premature ovarian insufficiency.

I Was looking for some things that would help for that. The time I was having sunflower cravings, like crazy craving for sunflower seeds, and I ended up coming across some research with vitamin E to help reverse premature ovarian insufficiency.

I feel like this is one of the things that helped me the most. it was very much like, wow, this is nutrition at its finest. And people like I think people assume they can get all their nutrients from their diet.

Even if they're eating like a perfect clean diet, sometimes you just might have more of a need for a specific nutrient to help overcome something that's going on in your body.

So this was when supplementation can be like a deal maker, you know, versus just trying to eat a lot of fish or trying just eat healthy diet. Everybody's like, eat Mediterranean diet, and I'm like not everybody in the Mediterranean is like fully healthy.

Like, let's really be realistic about that. Hoping to switch gears a little bit, I would love to ask you a bit more about fertility and some of the implications that bipolar disorder might have on women and men trying to conceive or planning to concede.

Yeah, so if somebody has a diagnosis of bipolar, disorder, both male and female, it is really important before you try to can seek to talk with your doctor.

and or medical team about which medications you're taking may need to be changed during the conception process. Now, there is some ongoing debate on some of the medications.

So, for example, Valproate, Some studies claim that preconception use of valproate by males is associated with the higher incidence of fetal malformations and or maybe miscarriages.

But other studies contradict that. So more studies are needed, but it is a risk. So, sometimes people think that just because they're a male and they are not going to be pregnant that it doesn't affect them.

But even if you're man, if your trying to conceive, the medications that you take for any medical condition, including bipolar disorder, can have an impact on your fertility.

Additionally, because people with bipolar disorder have a higher chance of insulin resistance, a high chance hyperhomocystinemia, higher chances of lower levels of B12 and or folate, which by the way might be the mechanism by which some studies are showing a pattern of fetal malformations or miscarriages with some of these medications because of the depletion, just a nutrient depleation.

So your nutrient levels can definitely affect not just your medication side effects and your mental health symptoms,

but they can also affect your fertility.

They can affect the outcome of the pregnancy. Whether you're male or female, they affect health of your sperm or eggs. So this is really important. I'm not in any way saying you should not take your medication.

You really do need to have a stable mood, ideally throughout the process of pregnancy. I mean, just even to maintain your couple's relationship with your child's other parent.

This is one of the areas that certainly my bipolar clients report struggling with. It's just having bipolar disorder can put strain on a relationship, whether you're the person with bipolar Because it does present some unique challenges, so you definitely want it to be well controlled.

There might be some considerations for the pregnant woman with bipolar disorder regarding whether to continue with certain medications or discontinue them at certain stages of pregnancy.

Then, of course, there are different ways that we would look at preconception and pregnancy tests depending on what medication a person is on. So, for example, once a woman is pregnant, we know that, you know, let's leave the medications out of the picture.

The two organs that grow during pregnancy actually are the kidneys and the thyroid. They increase in size. Now, the thyroids should never increase the size in such a way that you can actually see a goiter.

or feel it, that that is a need for an ultrasound. But if you were to measure the thyroid, even in somebody who does not have a goiter during pregnancy, there are subtle increases in size.

The kidneys increase more Obviously, you don't notice that because you do not see them, but the filtration rate increases drastically. This can drastically change the way that you process lithium medication.

All these things need to be discussed proactively with the medical team. Of course, if you take lithium when you have this increased filtration, then that is going to interact with pregnancy.

So, pregnancy plus lithium, that's going change the way that we want to look at a person's kidney markers, especially their filtration rate. But it might be necessary for somebody who's on lithium for their blood levels to be checked more frequently to make sure that they're not over-excreting it.

Because that could lead to a less effective control of their of, their mood symptoms. Yeah, it's really interesting because I appreciate you speaking about the men's health perspective, because not a lot of people.

talk about the health of the father, but that's very relevant for children's health. I know when I was working in the consulting practice, there was a lot of issues came out with valproic acid and valbroate causing fetal abnormalities.

And so it has been classified either as a category D or category X. So I'm not really sure which one it's in at the moment where it is not recommended for pregnant women.

women at all, or trying to conceive. You are supposed to vow not to prevent pregnancy if you're a female on valproic acid. And then with the lithium as well, it has a category D rating, which essentially means that they have found harm.

with congenital heart abnormalities. So that is debated. That is a very interesting question, but it is contradictory. I can't remember right now what the name of the heart abnormalty was, that it was supposedly shown that that was not truly caused by lithium.

So speaking with the lithium, we do know that it comes with a lot of toxic side effects, lithium carbonate, the prescription version. But there's also lithium orotate which is commonly referred to as nutritional lithium.

And that's been getting some traction in the mental health world. I'm curious what your thoughts are on using that with that person who might have bipolar disorder and is thinking of perhaps a more gentler route than lithium-carbonate.

It's very interesting to see how the studies are supporting the use of lithium orotate in clinical practice. So you can get away with using much lower doses.

A lot of the time, the lithium carbonate doses that are needed to achieve symptom relief in bipolar mood symptoms are in the order of hundreds of milligrams a day versus the effective dose that has been found to to treat bipolar symptoms in these studies is around 80 milligrams a day, which is significantly lower.

And because of the way that it's metabolized, it provides the neuropsychiatric benefits at a much lower dose without being toxic to the kidneys or the thyroid.

So it's incredibly advantageous. And certainly, it is not widespread. Most people's psychiatrists have not seen these studies. But I think that the more patients come to their psychiatrist and primary care doctor and medical team as a whole with a study and say, I'm interested in trying this alternative, what do you think?

I that this could definitely spark a little bit of a movement. Hopefully, the supplement companies will start making larger doses because if you're taking the typical supplement that comes in five milligrams per capsule, that's 16 pills a day.

That's a lot. A handful, right? It is. Yeah. And it's very interesting vital nutrients is a brand that makes 20 milligram capsules. But in some of the products, you actually end up spending more on.

on 80 milligrams a day of the higher dose than on the five milligram capsules. It's very interesting, but hopefully there will be enough of a movement towards using this as an alternative to pharmacological lithium carbonate that supplement companies will catch up and make an adequately priced products that are really appropriate for this population.

I think it would be wonderful. I know that women are at such a great risk for postpartum mental health issues, and I feel like post-partumn thyroiditis could definitely be a part of that.

Postpartum psychosis, progesterone, and recovery support

But can you speak to some of the issues that you see with bipolar disorder in the post partum period? Yeah. So the incidence of post parts of psychosis in baseline population is something around 0.2. So that's about two out of every thousand new moms are going to develop postpartum psychosis.

In the bipolar population, that is 25 to 50%. It's just huge. And of the Within the population that is diagnosed with postpartum psychosis, about 95% and sometimes more of those people meet the criteria for bipolar disorder.

And sometimes post partum is the first bipolar symptom a person will have. Now, how to tease that aside from postpartum thyroiditis is another question, but there's no question that bipolar disorder has a huge impact, especially, you know, undiagnosed bipolar disorders has huge impacts on the risk of maternal suicide and maternal infanticide, and this is hugely important.

You know even in the non-postpartal population, A person with bipolar disorder has a lifetime risk of suicide attempts that is around 60%. which is very high and a risk of 20 to 30 percent of dying by suicide.

That's just horrendous. But when we talk about maternal suicide and infanticide in the postpartum period, the fewer people fall through the diagnostic cracks, the better, because we're really talking about an area where we might be talking a low percentage of the population as a whole, but we are talking of a huge, huge impact in terms of benefits of screening prenatally for symptoms of bipolar disorder before a person even reaches the postpartum period.

I would also say a full thyroid panel with antibodies is really, really important, both pre-conception and during pregnancy. One of the other issues that I tend to see in women with postpartum mood disorders is also potentially a low progesterone level.

There's actually a new drug that was approved on the market. And from what my understanding is, it's like an infusion, very expensive, takes a few days of getting it.

It is essentially allopregnenolone, which is the metabolite of pro gesterones, calms us. And I know a lot of practitioners do advocate for testing women or just even without testing, supplementing with some progesterone in the postpartum period to help with their mood and help post partum depression.

So I'm not sure if this is something that you advocate as well, but I feel like, you know, women who are pregnant and are just wanting to prepare for a healthy delivery, they need to have some of these things on their radar.

For sure. Yeah, you know, I have worked with a small subset of women who actually have autoimmune reactions to progesterone supplementation. It's rare, but it can sometimes happen.

But certainly, you know, I think it's one thing to keep on the radar. It's not something that I've looked into that much. I'm actually really fascinated now that you've mentioned, specifically the research in allopurgnellolone.

But yeah, it makes so much sense. When you give birth, You go from having these robust levels of progesterone to having just really low levels. And we forget these aren't just sex hormones, they're neuro steroids.

they have a huge role in our cognition and mental health balance. So for some people going from having robust levels in pregnancy to just tanking postpartum can be devastating from a hormonal balance and a mental-health perspective.

I definitely think women who have thyroid dysfunction, they're at greater risk for this, and then definitely women with, who are in perimenopause. So I am no spring chicken myself.

And I know a lot of women are waiting to have their babies in their late 30s, sometimes in the early 40s sometimes mid 40. That is a time when our progesterone levels start to decline naturally.

that might be very relevant for for a subset of women. You mentioned an autoimmune reaction to progesterone. I was actually hoping to get a little bit more info from you on that I did.

potentially have had more irritability, anxiety, potentially some of them with PMDD might have adverse reactions to progesterone. I haven't seen it very frequently, but I'm curious if you perhaps know what the right subset of patients that might occur in or like how would you if you were looking at somebody and you would be like wow this person's probably going to have a higher risk of reacting poorly to progesterone can you do you have way of predicting that or maybe having some initial thoughts or perhaps you can describe what you've seen.

Yeah, so let me answer that with two different threads. One of them is, Lara Brighton has been talking about this recently. And I believe that the connecting thread that she talks about is histamine.

This is also something that I've seen in clinical practice. But she works, you know, she's looking at much larger numbers than what I have seen clinically.

I did work once with a woman who had autoimmune progesterone dermatitis, and it's considered to be very rare. And it was so severe that she was in her 40s with her first pregnancy.

She came to me after having this issue, she had lost her 1st pregnancy because she completely unable to continue with progesterone supplementation. She came to me actually because she was ready to conceive again.

She had healed from the loss. she still had low progesterone, but she knew she couldn't take supplemental

progesterone and she just could not move forward with having the autoimmune progeserondermatitis.

Now, it's very interesting because, she is a person who has hypermobile Ehlers-Danlos syndrome which comes with with a tendency towards mast cell activation.

So certainly there was very likely a connecting thread between those aspects. And we just work together very functionally from a whole person perspective.

somehow everything just flowed really well for her. I don't remember. She was one of my first pregnancy clients of all time, and it was a long time ago.

Her son is now 12 and a half. So I remember the details of what we did. Actually, I didn't even know that much clinically at that point, but I read some of the literature on autoimmune progesterone dermatitis and just addressed her case in a bio individual level and went really So I didn't really take a lot deeper in that, but having that client really did make me a little more protective.

of progesterone, I refer out so much to NAPRO clinicians. They just dial in on the testing and the supplementation. I have had clients who have a history of infertility and miscarriage who had the most amazing experiences with the bio-individualized, ongoing testing, and supplementing of Progesteron during preconception and pregnancy.

It's just wonderful. makes such a difference to the outcomes. Yes, I'm a NAPRO success story as well. So I was actually told that potentially IVF or donor eggs were the only way that I could likely have children, another child.

And so I am a big proponent. You know, referring out robustly to Napro clinicians has helped me in many ways have high success without really forcing me to learn as much about progesterone as I would like to know.

So on the one hand, it's been super helpful. I also feel like referring those clients out to somebody where it is robustly inside their scope of practice, where is not so robust inside mine, It frees up my bandwidth to really focus in on all the other areas that the client has going on.

But yes, progesterone is so incredibly important to so many things, including cognition and mental well-being. Well, and it's really fascinating that you bring up that mass cell issues, histamine issues skin issues hypermobile issues.

These can all be potential people who maybe they're in perimenopause, but something to think about with progesterone supplementation. Maybe you're not doing so well on it and perhaps you need a whole body approach.

your gut health, maybe you need to look at mold exposure, dealing with histamine metabolism, using things like B6 or vitamin C or magnesium to support your progesterone levels with a little bit more of a natural approach.

So there are a lot of things that I'm still learning and I am excited to have had the opportunity to really pick your brain today. I really appreciate you taking the time out of your busy schedule to come and chat with us about this really, really important topic.

It's my pleasure. You have a I really love how you work to empower women, especially women in their conception state. So you actually have a prenatal guide.

We're going to link to that in the show notes. And this is a free guide for choosing the best pre natal for the individual, which people can can get from your website.

You also have a course on how to understand some of your labs. When you are trying to conceive. Can you tell us more about that? I'm fascinated. I wonder, you know, haven't really studied conception labs, so I would love to get that information from you.

Can you tell us more about that? Yeah. So, you know, it was a few years ago that my colleague, Marianne Marks,

and I met to talk about potentially collaborating on some research.

We were introduced by Victoria Lafont, who is a wonderful colleague who's very big on evidence-based healthcare. She introduces, she said, I don't know what you're going to do together, but you are going do something.

And Marianne and I talked and what I, the first thing I told her is I love your software, Mariann. But please help me with this because when I work with women who are pregnant, their labs come back, you know, just marked with all kinds of stuff flagged and it's actually normal for pregnancy.

So I'm constantly looking at my Teet's book of clinical chemistry. To make sure and I'm spending so much time in PubMed looking for the actual reference range on a case by case basis and reassuring people but could we please get these actual like trimester by trimesters reference ranges for markers that change into your software.

So we identified over a hundred markers that change by trimester or pregnancy, and then we developed the course. And then, you know, also a number of ranges that changed during postpartum, but we also ended up including preconception in it because we're advocating running markers on both males and females before they try to conceive, not so much because we're looking at different ranges, although of course, as you know, thyroid markers, what is considered to be an optimal thyroid marker for somebody trying to concede is going to a bit different from somebody who doesn't have that objective.

So suboptimal thyroid function that might be really dismissed in allopathic healthcare and somebody who's not trying to conceive, there is a slightly higher chance that it's going to be dismissed by the same allopathy healthcare members just because it is known.

Even going back to progesterone, I mean, the there isn't intimate connection between T3 and pro gesterones. There's so much crosstalk between those two.

So correcting one can help correct the other a lot of the time. So just dialing in on those nutrient levels, on blood sugar markers, homocysteine, folate, B12, zinc, copper, these kinds of things that can really affect the quality of sperm and egg cells before people try to conceive can make a huge difference in the outcomes.

Vitamin D. You know, even just looking at whether somebody has an autoimmune condition going on that could be affecting their ability to conceive or the quality of their pregnancy is a big deal.

Thank you so much for creating this valuable course. And thank you, so, much, for providing us with the coupon code. So it's going to be whence100. This will give you 10% off, and I'm going add the link to the master class, What You Never Learned About Blood Work and Preconception, Pregnancy, & Postpartum in the show notes.

I really have loved how you have dedicated your career and spent so much of your brain power on learning how to help people with bipolar disorder and with conception and sometimes the overlap of the two, because I feel like this is such an important population that really doesn't get enough resources and attention.

And a lot of women, you know, whether they have bipolar or not, they really struggle postpartum with their mood. resources that we talked about can be incredibly helpful just getting your nutrient levels adjusted, figuring out if you've got a thyroid condition, if perhaps it is something like bipolar disorder, and knowing that even if have a mental health diagnosis, it's not necessarily a life sentence.

It is what you can absolutely do to empower yourself and make yourself feel better and thrive and feel human. And I really appreciate you looking at the humanity of it all, right?

And being a champion and advocate for women and men all over the world. And everybody listening, I hope this conversation has been healing on your healing journey.

Until next time.