PANS/PANDAS: Looking Beyond the Infection to the Gut, Brain, and Immune System Transcript

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Introduction to Gut-Brain Connections

And if you look, you know, specifically at the gut, mold, right, candida, things like that, all play a role in this because they, again, affect neurotransmitters.

So, for example, a lot of fungal overgrowth will cause problems with sleep because that pathway of serotonin and melatonin is interrupted. And so kids that don't make enough can't sleep very well, but all of these things can also present as other symptoms.

Fungal stuck is usually high histamine, so then you run into allergies and asthma and all these Everything is connected and I'm here to tell you how. I am Dr.

Laura Hanson with Connect My Brain. This podcast is for moms who are concerned about their child's development. The brain impacts our mind, body and overall health.

I explain how your brain is wired, what happens when it's out of balance, and how early childhood development not only impacts your child, but can affect you as an adult years later.

Want to know how to improve your life? Join me and learn about your amazing brain and what it can do for you. Hi everybody, it's Dr. Laura with Connect Your Child's Brain.

And you know, we always add connect my brain, connect your brain. We're connecting brains, okay?

Podcast Welcome and Guest Introduction

Because the brain is at the heart of what it is that has to be considered when we're looking at child development. Tonight, I'm so excited to have my guest, Melissa Smith, who is a pediatric nurse practitioner, which is so fantastic.

Plus, she's only about an hour from me because she is in Athens, Georgia, and I'm in Atlanta, George. And making these connections are so important so that we can help more kids.

So welcome, Melissa, to the podcast. Thank you for having me. We are excited to have you. Tonight, everyone, we're going to really focus on pans and pandas.

We're going to figure out what it is, what causes it, and what kind of things can we do about it. I think it's a very important topic. And down the road, if you want to go listen to some podcasts that I did on it be sure and go over to the website Connect My Brain.

Just go type in the search bar and you'll get to have some additional information. So Melissa, welcome. Take it away. What should we know? So I think the first thing to talk about would be the definition of what it is.

And so there's two terms, PANS and PANDIS. PAN stands for Pediatric Autoimmune Neuropsychiatric Syndrome. Under that umbrella term is P ANDIS, which is pediatric autoimmune neuropsychiatric disorder associated with strep.

And what happens with these kids by definition typically is they're usually very extroverted, they are developing great, their growing great and then all of a sudden like the flip of the switch something changes and these kid become much more introverted.

They don't want to leave the house. much more mood ability, even in anger outbursts, they get very angry. And it's, the parents are left to say, what happened?

I mean, he was fine. Now all of a sudden, all these things are happening.

Defining PANS and PANDAS

Pandis is specifically for strut, but that's never ever just the only problem. So that to me is a really key element. Let's really make sure that the audience hears that component that pandas is associated to strep infections.

One of the things that I've heard over the course of my career is parents really believing, you know, like all the kids, my kid had strep, what's the big deal?

So can you give us kind of that mechanism, What goes on? in strep, does it have anything to do with the way that it might be managed and the reoccurrence or what goes on?

Why would streps do this and is strept getting in the brain? So the ways that I always think about this is that, it is never ever ever just one factor.

And so a lot of people, when I first started treating PANS-PANDAS, I would check titer levels, and if they were elevated, i would say, oh yes, for sure it's PANDAs, then we would use antibiotics.

And we did that because we saw changes in kids. So you do antibiotics and these kids change and they start doing very well, but then that never lasts, right?

And, so what I have found is that I wish they would take away PANDS actually and just call it Pans, because It is never ever ever just one factor. And so there becomes, you know, high antibody titers.

There becomes heavy metals and parasites. When parents come in, they're like, I don't know what to focus on. My response is always, You got to work on the foundation, right?

Because the Foundation being the gut, if it's not strong, then the house doesn't stand. Same thing with the Pan's Pandas, Right? So those titres, the reason there are problems is because they act like dopamine, so they increase dopamine.

And high dopamine kids are very, very tightly wound children. So those are kids that don't want to leave their room. They can have OCD, tics, some of them hallucinate.

Very terrifying symptoms, but it comes from too much dopamine on board. And so it's impossible to go in there and treat every individual thing. It just, you can't do it.

But my thing is you get the body doing what it supposed to do, right? Kind of redirect things, and then it can start to clear things better. and it doesn't have to be just strep, mycoplasma, mono, all of those different things.

can act the same way Struct does, it just increases dopamine. So let's really make sure everybody understands dopamine is a neurotransmitter in your brain and it should have a baseline.

It's also the one that's related to more addictive kind of personalities like they're finding people scrolling on their phones, alcohol use, sugary foods, all these things can just spike up dopamine.

So any of these childhood infections also have the tendency to raise dopamine, is that accurate?

Strep, Dopamine, and Symptom Flare-Ups

Yes, and the problem with that is, you know, low dopamine high dopamine looks the same, so you'll have a lot of

kids that will come in with, quote, ADHD symptoms, right?

They don't have ADHD, but they actually have the opposite issue, which is they have too much on board. And so if you think of it like a bell curve, right, dopamine kind of sits right in the middle.

That's where you want it to be. If you're above or you are below, that's when you run into problems. PANS kids typically have to much dopamine on-board, and that is the problem.

So it affects other systems, those titers are one factor. You also have a lot of things like fungal overgrowth, clustering, there are tons of links to that that also cause increases in dopamine.

A couple of things. One thing, we both have been attending the MAPS conferences, which is the Medical Academy for Pediatrics and Special Needs. one of the things that came out in one the conferences that I attended was talking about that we really couldn't even just completely rely on a strep antibody titer tests, because you could have kids with low antibody titers, but still have all these kinds of symptoms.

Have you found that to be true too? Yeah, I mean, double-check baseline titers, but I never repeat them again. And the reason is because while they play a role, the bigger thing that you really need to fix is things like genetic SNPs.

You need fix the gut, right? Because once you get that working, I always tell parents, you know, that the body can't put out 15 fires, it tries to, and it can.

So there's where you run into opportunistic things. I have found the best and long-term success of treating PANS is you have to work on the Some people will use antibiotics and the problem with that long term is it decimates the gut microbiome and it will help them temporarily because it temporarily lowers dopamine.

But then you're in this constant flare where it's like whatever tips their bucket, then your back where you were before. So my goal is to go in there and empty it for them, right?

So now you have a much bigger threshold before you see a change in your kid. Yeah, I mean, the gut is just really the foundation for everything. And you mix in whatever you want to mix.

But that's why I have this six, seven pages of a history so that I can find out what's been the journey. Because all these kids are in a developmental process.

And the gut is one of the areas that it's not mature when you get here. It takes a couple of years to mature after that baby is born. And now we're learning all kinds of things about what goes on in pregnancy and the impact that is has on that, baby.

Sometimes those babies can be coming in and they're already either inflamed, they're in a deficit. Oh, and that's the other piece is to tie in there this neuroimmune connection, you know, that you're growing, your developing things, but you are also building a brain, building the neurology.

So looking at the history, that's the one thing I've got like columns where I want them to go and check what has gone on. And that what I think you're saying, it doesn't have to be just strep.

It could just be dysbiosis in the gut. it could be the, history that you have, and it leads you into this direction that, you've really have an autoimmune storm.

Gut Health, Fungal Overgrowth, and Neurotransmitters

Yes. Is that what you're finding? Yes, and I would say I have never found a case where it's just strep alone. And if you look, you know, specifically at the gut mold, right, candida, things like that, all play a role in this because they again affect neurotransmitters.

So, for example, a lot of fungal overgrowth will cause problems with sleep because that pathway of serotonin and melatonin is interrupted. And so kids that don't make enough can't sleep very well, right?

But all of these things can also present as other symptoms. So fungal stuff is usually high histamines. And then you run into allergies and asthma and all these thing that go along with it.

But when you clear it from them, they do really well. They found in most autistic children that there's a correlation between clostridial overgrowth and fungall stuff as well And when you clear both of those, they do really well.

But again, we don't tend to look there in traditional medicine. We tend kind of put, you know, band-aids on problems. And so I don t look at any mental health, anything anymore as a label until you've done the groundwork.

You've got to at the gut. Because it's just not fair to these kids. They're at a disadvantage anyway. Our environment is horrible, and we're doing it to our children, right?

And then all of these mental-health things are on the rise. I can't tell you how many times those people have come in with incorrect diagnosis, then you do the groundwork and they're great, right?

So yeah, it kind of changes my outlook on a lot of mental health stuff doing this. Melissa, I love that because I'm not one to focus on the label at all.

There's just too many things that can play a part in the outcome. This was even said from some other guests on podcast that the kids are just getting so bombarded way more than even when I was little.

Now, what do you think about age framework? Do you find there is an optimal age that if you can really get this work going and move the needle, you have a higher outcome plus sign compared to if wait.

Do find that age plays a part in the outcome? Well, it also depends on symptoms. And so if you think of things like eczema, exema is something that we tend to normalize in babies.

We shouldn't, because it's not normal. But that, I've seen terrible exima cases as early as a year, right? And, so at that point, starting to rebuild the foundation is important for these kids.

Some of the testing I do, you can't do till they're two. but the earlier that you do it, the better, Because you start to kind of rebuild. and then also methylation.

You have to get, run their snips, see what is being turned on. that you can help bypass, because there's so many of them that are turned on. And so any age, really, but some of the testing is limited to when you start it.

So some my super young kiddos with eczema can't do an O test on, right? But do they have mold? Is that contributing as well? You can do mycotox. There's different types of testing that can you do to check all of this.

It just depends on their symptoms. Do you any of genomic testing? No, I don't. I actually do mosaic testing, so I do the organic acid test methylation panel.

They're testing just because I know it very, very well, and it gives me the answers. And I always tell parents I start with a couple tests. It can get very costly in the functional medicine world.

And so if you inundate them with, you know, six different tests, I mean, if I came to you and I told you my child wasn't doing well, usually I would pay it, but it's just more information that you don't need.

So I'm very specific with the tests I order, and then I will walk parents through those markers to show them what is happening. Like, why does he have this symptom, right?

Well, it is related to this. And I just think it great for them to understand because it scary to walk through that with a

child. I couldn't even imagine.

Understanding where it coming from I think is a huge empowering thing to do with parents. I have been doing the genomic testing since last August, and one of the reasons I like it is an audience hear the differences in the word.

Genomic is not just genetic testing, okay? It has to do with what has been passed down ancestrally and then what epigenetics have occurred. That word epi-genetic CPI means what plays upon the gene.

And what I had described to me was the testing really kicked off in the 80s because autism was on such a rise. And there was a belief that they were going to find a gene for autism and they didn't.

But what they found was all these variants.

Testing, Genetics, and Methylation

and based on, of course, how many people took the test, the populations that were most susceptible who had a single mutation versus a double mutation to no variant whatsoever.

I like it because it's saliva and especially in those situations where You can't get on a little kid. It is something you can get. On a kid and the blueprint that it has provided has been really powerful.

In fact, I had a family just recently do it on their son who's seven and a half. and the dad, I mean, they are in it to win it, but for five years they haven't gotten this hopeful information that you and I know, Melissa, all the things that people are learning that we can see and figure out.

They have not been exposed to that. And the frustration, That's just such a long time to be almost like in a closet about what's going on for their child.

And when the dad read it, he was like, my gosh, it all makes so much sense now. So I really, I'm like you, appreciate the data to able, and I use Mosaic as well.

They're great tests. What do we do with this? You know, It's one thing to define it. What do we do with it? So there are definitely different thoughts on this.

And when I first started treating this, this is back like 10 years ago, I did I looked at the research and how they were treating it and it was all antibiotics was typically they use that steroids.

i have antibiotics and it never made sense to me at the time because i'm like we're not really treating active infections so why are we using antibiotics?

And these kids did get better but they never ever stayed better right and so so it got me down the path as what is going on in the foundation like, we need to really look there.

And most all of my children have usually a fungal overgrowth plus clostridium plus mitochondrial problems. And so what I do is I get rid of those things because it's kind of like pulling weeds out of a garden, right?

And then you have all these empty holes and they have leaky gut, which leads to leakey brain. So rebuilding that foundation for them and helping with detox pathways and help them with all then the body starts to do what it's supposed to.

It's a different process of thought, but I've seen people repeat antibiotics, be on antibiotics for years on end, and it just breaks my heart because, number one, it destroys their gut, right?

And so then you run into more Candida, more issues, so I found the best way is to clear those things, rebuild the gut support the guts, support mitochondria, whatever else is needed, then get inflammation down.

And these kids do really, really well. You know, Melissa, I'd love your thoughts. I think that's such an important part for us to address with parents because I they get scared, you know?

Do you find that too? Oh, for sure. And or they've been to many other places and they come to me and there they have all of these tests, right? And they'll all this information, which is great and helpful.

But they're overwhelmed. They don't understand what's going on. And if you just take the time to, you know, get a full history and kind of explain things, it gets less scary, right?

That's why, I'm a very black and white kind-of thinker. If you're going to put me on something, then show me where in the body it's working. When you do that, parents are like, well, that makes sense.

That makes a whole lot more sense because it is scary. It's terrifying. behaviors these kids fall into are terrifying. And I couldn't imagine as a parent that, you know, going through that.

So yes, I do find it scary, but I find that if you also empower them and walk them through these things and then explain to them why we're doing this, then it becomes much less scary.

I am just so excited that I've reconnected with you. And you're right in Athens, because I do, I run across every now and then families that the child has that diagnosis of PANS, PANDAS, whatever, which one, and they are on antibiotics for years.

And then, you know, if you think about the seasonal stuff, and it's like, well, we can't take a chance that, they're going to get it again, because it'll be flu season and they'll going be exposed.

And I think it is so important that we really speak to parents and help them understand that in an acute, I love what you said, Why are we treating with an antibiotic if it's not an acute infection?

That is key, okay? And correct me if I'm wrong, these are diagnoses that are just telling you, you still just have a lot of strep going on inside of you.

It's it not acute.

Treatment Beyond Antibiotics

but your brain is still thinking you got to have an immune reaction and over time like anything it gets overwhelmed and now because that pattern has been set it really just starts overly attacking the whole body.

Could that also be why, if we're changing the metabolic, the inflammation, and the chemistry, is that why there are so many fungal overgrowth and claustridia overgrowths, things like that?

So those are more opportunistic and those were actually a bigger problem because of what they can do. So we all have to some degree, the bacteria used in our gut microbiome, but when it gets a foothold and it get symptomatic, that's when you need to treat it.

And I've found that that treating that then in turn the body can start to get bring down titers. Titers are interesting because there's no timeline on that.

I don't know how long it's been like that and I have even rechecked titres and they don' go down that But symptoms improve and they improve based on other things.

So I don't typically recheck them. But those titers are just one more area, like one drop in the bucket for them, right? And so if you go back and you support the body and get rid of those big things that are in my gut, this shouldn't be there.

They do fantastically well. I had a patient who came in and I have a lot of patients who have hypersensitivity to close in general. So they didn't want to wear socks, they don't wanna wear underwear.

And it was 100% Clostridium that was in the gut microbiome that raising dopamine for her again. Then she became very sensitive. So we treated that and within two months she came back wearing a brand new pair of socks.

These are things that if you look at them they are a little scary, like why you acting like that? But the connection between the got and the brain is so important and getting rid of things shouldn't be there.

Well, and two, I'll plug in, like with Reflex work, these kids, regardless of what they're going through, they are all going to regress because their library is not very big, right?

So if something were to happen to me, i might have many things that i could use in my strategies. A child doesn't. So a child is going to regress. They're going go back into those reflexes and those sensitivities to socks and waistbands and all that kind of stuff is reflex activity.

But to calm it down and to see the integration re-happen is marvelous. And hey, audience, realize these reflexes are still in us. If you were to have a heart attack or stroke, you're going back to your reflex, too, because it's the rudimentary place of all learning.

So depending upon what somebody might go through. But that's wonderful, Melissa, that you've actually seen this reflex reemerging and then work on the chemistry and see it quiet down.

Why I tell you I'm so excited about this podcast. I really am. And audience, I guarantee you somebody listening to this, you know somebody that's going through this and you gotta share these podcasts with people.

We're bringing on all kinds of fabulous providers. You're learning all kind of pieces of information and we gotta to share it. So make sure you subscribe and make you share.

All right. So what about, and I didn't ask you this beforehand, so if you don't want to go there, you just say, I don' So, yeah. So unfortunately, they're a huge player in all of this.

And I do tell patients when they come in, and most of them don't continue vaccines, but if they are going to do that, then I'm not a good fit for them because whatever I doing working on the gut and all that they will negate the minute they get a vaccine.

The reason is because again, if we can't detox and we give them so many of these toxins, their neuroinflammatory, trigger things, And so again, it's kind of like, can be the tipping point for a lot of kids.

And you hear all the time, well, he was developing fine, right? And then he got his vaccine and he's a different kid. Well, there was a a going on underneath the water before that happened, but you see what happens when that, you know, when he gets the vaccine.

So vaccines, gosh, I'm going to have a whole show on vaccines. I mean, there's so much to say there. I encourage parents to really dig deep into vaccines.

My kids are 18 and 21. with these kids being able to detox properly, plus genes, epigenetics, right, is being turned on. And when they're turned down, they change the ability to be detox.

So if they want to continue totally their choice, it wouldn't be a good fit for me or them. Well, I couldn't agree more because, you know, it's kind of like acetametophen.

Vaccines, Detox, and Cancer Concerns

And, there's acetometophan that's under one name, and then there is acetaminophene under another name.

People are thinking that if I don't take the one that has been in the limelight, then I'm okay to take this other one.

That's just not the case. Acetametophene is acetometophane. Just because it has a different label doesn't mean anything. And we are really at a tipping point in the world.

It isn't the same as it was when I was a kid. I got one vaccine, but I think it had like four or five in it. and I remember it went into my arm. i've never had anything ever again.

Me and my siblings, We were vaccinated between 1955 and 1965. And I have done, and I love the same thing, you got to just do some research. It is a personal decision.

were not trying to make anybody feel bad, but I didn't know what I did know either. But I get a really, really deep dive back when my son was coming. And that's when I decided, I don't think we should do this.

The main reason for me was because my siblings and I, we were vaccinated between 55 and 65 and the research that I was reading was talking about the increased risk of cancer because back then they were not like really looking at the animals that they were harvesting the vaccines in.

So the serum became part of the animal and whatever the anima had was also passed into our bodies. I had a very atypical measles in the fourth grade and had to live in darkness for two solid weeks, they told my parents that if she got too much sunlight, she could go blind.

And to this day, I do have light sensitivity. What a typical measle will do is it will start central And when it's most virulent, it goes out to the periphery.

Well, this didn't do that. It went from the peripheral to central. And then I lost a brother in 2001. He was only 47 years old. Now, I can't say this with 100% certainty, but he was diagnosed with multiple myeloma at 47. Multiple myelooma is old man's cancer, not a young man at forty seven.

And it's in the bone marrow, which is really dense in red blood cells. And that's where the cancer was. In 18 months, diagnosis to death, it was incredibly aggressive.

We're seeing aggressive cancers today, right? So again, this is about information. And I, you know, that's one of the reasons why I'm in health care is a doctor, nurse practitioner, whatever we are, we're meant to teach and educate because you have to have tools to make decisions.

But whatever you choose, That is your right. I want to be able to preserve my right and I. Want everybody to. Be able. To preserve their health. Care decisions, I wanted them to, be.

Able. to Preserve that for themselves too. But have you made any connection with vaccines and cancer at all in your career? COVID vaccine big time. The COVID is because it's not a vaccine, right?

And you can talk to oncologists that are seeing these incredibly rapid cancers and then also weird cancers in people that are young and healthy and all of a sudden they go from stage one to stage four.

So the COVID vaccine did a lot of damage that way. It also caused a lotta other issues, but cancer for sure, turbo cancers, and we see them all the time now.

And so that's always my first question, not even if you had COVID, right? It's more the vaccine and it has to do with what's in the And so an end red blood cells, which is super interesting because that again goes back to methylation and what snips they have and all of that.

So there is a lot there, but yes, I've seen and I'd seen kids with cancers that it's unfortunate. And I have definitely seen things like that on the rise.

Yeah. Wow. Well, one of the things that I was asking you before we came on was, you know, do you do telehealth? This is so powerful. And, what kind of a timeline?

Is it a year out before somebody could actually connect with you? It's about two months out right now, two to three months. So yeah, not a year, which is great.

But yeah. It is so important because we need the medical connection. And my gosh, if you're told that it's going to be a years or two before you could see somebody, what are people supposed to do?

So, I mean, this is absolutely a gift to have you on my podcast. I can't thank you enough for taking the time to be here.

Finding Melissa and Final Takeaways

So a couple of things that I like to always finish with, and I'll give you a heads up on everything. I'd like you to connect dots. Connect my brain, connect the dots." So think about something that you could connect a dot for somebody and then tell us how we can get in contact with you.

And then what's one thing that from our time together. So connecting the dots, I guess the biggest takeaway is mental health in children should never be a simple diagnosis, right?

It should always be much more involved and you really need to look at all the factors before you make that because they all look the same. I mean, most of them look just toxic, so if you get a diagnosis for your child and they're like, this just doesn't feel right, doesn' seem right.

Then do the groundwork, come in and let us look because all of that plays a key role and a lot of those things are changed, those diagnosis, when you do that works.

They're not even really there anymore. So that's kind of the big thing that I would like people, especially families, because it's terrifying and it is getting younger and younger, and the kids that come in to see me are on medications they don't need to be on.

And it's unfortunate because that's just, we're normalizing, I guess. I heard that someone said that we have a pandemic about immunity in children and no one's asking the reason why, and it is incredibly true.

And so that would be the ask questions, right? And if you don't like the questions that the answers you get from those questions find somebody else who does take a deeper look, find someone else that thinks that is out of the box.

Wonderful. So how do we find you? So my website is newviewpediatrics.com and you can also reach out to us via email which is on the website and then you actually schedule an appointment online if you'd like to as well.

And what's the web site name again? new view pediatricks. com. New view Pediatrix. That's terrific. Okay, great. Well, I can't thank you enough for spending a little time with me this evening.

This has been a great connection and I'm excited. I really am. Okay, so I already mentioned to you, you got to know somebody who's dealing with a child.

Maybe it is ADHD, that's under the mental health canopy. Okay, maybe it is already a pan-span that's kind of a diagnosis. Maybe it's just ill health and you can't put your finger on it.

We've got doctors and nurses that are really doing deep dives to try to get our children today going in a new direction. and I would tell you right now, Melissa Smith is at the top of the list.

Okay, so if I can be of any service to you, make sure you go over to connectmybrain.com. You can always

schedule a complimentary consultation and i will be the one that calls you back.

Okay, trying to think about some events that we've got coming up. One is actually this Saturday, we're doing a back to school event expo at Town Center Mall, but I have a feeling this will come out after that.

But we are launching our developmental kit for parents. So be sure and go and look at the website so that you can see getting a tool in your own hand to get your child started in the right direction.

And as always, thanks for tuning in and be blessed. Thanks for listening. I hope today's lesson will help you or someone you love. Do you have a question or just really want to talk to somebody about brains?

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