Autism, Chronic Illness, and the Root-Cause Model of Pediatric Care Transcript

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MAPS Webinar Introduction

But type 2 diabetes, the issue is not low insulin. The issue resistance to the insulin you're making. So what does the body do? It makes more insulin, more, and more.

And people don't understand that hypoglycemia, which is caused by too much insulin becomes a risk factor for type two diabetes. Hi, welcome to the MAPS webinar series, Healing Tomorrow's Future.

We are thrilled to be bringing you this series packed with valuable information and education within our community. My name is Honey Rinusella and I'm the Executive Director of MAPPS, the Medical Academy of Pediatrics and Special Needs.

Within these webinars, we're able to empower clinicians on the knowledge and tools to support patients facing a variety of health challenges. For more information on MAPS or to register for a conference, please visit us at www.medmaps.org.

Root Cause Thinking in Complex Patients

Thanks for joining us on this journey towards a brighter, healthier future. So I'm John Gaitanis. I am a child neurologist. On the medical board of MAPS, the Medical Academy of Pediatrics and Special Needs.

And we're here at MedMAPs in Charlotte, North Carolina, March, 2026. Who joins me today is James Nushawander, who's really our head, our leader, Our grandpa of this great organization.

So it's a really an honor to speak to him and to have a chance to learn and engage, which is exactly what we do in all of maps. Yes. Well, I've been called many things, but never a grandpa.

That's your new title. My new titles. They haven't told me yet. The board voted. All right. Probably haven't heard that one in a while. Yeah. So, I mean, you know, the beautiful thing about MAPS is I think we're, we were born out of a need in pediatrics.

And I you've seen that coming from your background. I certainly was an emergency room physician. You know you go from see a patient, fix a patients, discharge a or admit a and you're done.

to dealing with chronic, very complex medical problems. And I know for me that transition had a lot to do with the patients that I was seeing in my private practice and also just this desire to learn.

Why is this happening? Yeah. Right. And you kind of knew when I worked in the emergency room, you always knew those patients that you could help. and then there were all the ones that, yeah, You could put a bandaid on it, but couldn't really help with what was going on with them.

Yeah, I mean, we would, sometimes we'd use the term bad protoplasm. And you just sort of know it when you see it, right? So you know that this is somebody who doesn't seem that they're gonna heal.

Working in the emergency room, you'd see this med list that's like a page long, just on the medlist. You've got in that original HPI, like you look at that first sentence and there's probably 10 or 15 diagnoses mentioned.

So a resident's presenting to you, they'll tell you the age. You know, a hundred diagnoses in that first line. Right. And you're saying, OK, you already are.

You're like, what am I going to do? And what's the actual problem here? Right, but you know that person has 20

problems, too many meds, and you are stuck.

Well, I think this has been the medical model that we were both trained in. I always say that's my allopathic brain and that can sometimes be a problem caring for complex patients because if you think like an allopath, then yeah, you see a patient, they have 20 complaints, 20 problems.

You start thinking as a systems biologist and you say, whoa, In all likelihood, what they have is one or two problems manifesting 20 different ways.

Cell Danger Response and Chronic Illness

Can you walk it back to those one- or-two problems? That's really one of the things that maps, and prior to maps there was Dan, that rekindled that love of biochemistry.

Here's a kid banging his head against the wall flapping, No eye contact, non-speaking, they're rashy, They have foul-smelling stools, you know they have 20 different complaints.

What's the biochemical explanations for what you're seeing there? And that's really part of what I learned from MAPS and why I fell in love with it from the very first conference I ever went to 20 years ago now.

It's a Occam's razor, you know, creating that unifying understanding. But if you think of how we were trained, how were both trained. We were trying to break it down when presenting by system.

Right. So for type two diabetes, we're going to do this with the insulin. For the COPD, We're gonna do with this inhaler. for the coronary artery disease, were doing this.

So now you've got a patient and you felt good about it because you had a med for each problem, right? You had 10 problems. You could say this is the med we're going to do.

We're gonna tweak this one, we can tweak that one. At no point did anybody say, you know, this guy's got metabolic syndrome. They're hyperinflammatory.

maybe we need some diet education, maybe need to think about their mitochondrial functioning or their overall metabolic health, or the fact that they're hyperinflammatory.

We didn't really think in those terms, we weren't encouraged to in these terms. And a lot of times we were not trained to thing that way. You know, one of the great things I learned in MAPS, and this is probably 2012, 2013, was this whole concept of a cell danger response.

I mean, if you want a really underlying foundational cause of illness, especially chronic illness is persistent activation of that cell-danger response, And then when you say, okay, well, what activates it?

Well, let's see. It's designed for injury and infection. but it's been co-opted by stress and a laundry list of toxins, right? And so how many of our kids have stress, and toxicity in their life?

All of them? At this point, yeah. I mean, you'd have to live in a cabin really somewhere in rural Alaska. Right. But I'm not sure where you have live anymore.

Yeah. No, it's very hard to find a place where kids are not being exposed to this stuff. You know, It's in the food. It is in there. it is the water. And unfortunately, because I've been in practice long enough to know there was a flexion point.

When I trained, I was actually told If your patient is on more than three drugs, you're a bad doctor, right? Now it's the opposite. If you patient isn't on at least three, drugs right.

You're not doing your job. Your differential diagnosis list isn' long enough, or you not providing enough pharmaceuticals to cover that list. And that's been a sea change in the last 30, 40 years that I've been practicing.

This idea that for every symptom there's a pharmaceutical, And I always say, if these pharmaceuticals had nothing but benefit, so, you know, back to the ER.

Patient comes into the E. R., they have an asthmatic bronchitis, they can't breathe, when they hit the door, their panic, You know they're blue, They can breathe.

We hit them with treatments, we slam them steroids, We get them on antibiotics, whatever, and I'm going to discharge them On a steroid taper and some inhalers that they Can use for the next week or two.

Great. Short-term treatment fixes the acute problem. If you applied that to the rest of our life, let's just take a steroid. How long can you be on a steroids before it completely destroys your ecosystem?

In the hospital, it happens quite often where you add a med for that acute problem and you never get rid of that. That's because we all were absent today when they taught us how to de-prescribe.

Medication Toxicity and Deprescribing

I missed that lecture. I did, because we're not taught that. The joke is absolutely that, but the reality is we are not thought that and I know MAPS is all about pediatrics but a lot of geriatric medication is doing exactly that Grandma's 85 years old, here's her 20 meds that she's on, how many does she really need to be on?

You've heard the term rational polypharmacy. Is there such a thing? Or is that just an oxymoron? It's that every pharmaceutical in its own right is a toxin.

It just depends on what's the benefit versus what the toxicity of what you're carrying. Everybody's opened up a package insert for any drug they're taking.

If you read the package inserts, you'd throw the pill bottle away. Nobody in their same mind would take it knowing everything in there. But so we understand that there's toxicity associated drugs and then we just sort of ignore it.

And particularly when the patient, you know, write that first prescription for your hypertension patient. How long am I going to be on this medication?

The rest of your life, right? And they don't have an end point to it and when you're talking that. degree of usage, then you have to factor in the toxicity, and we just don't.

I mean, we're not taught about that, you know, You have this drug, now we are going to add in this one, this and this. How does that escalate in terms of the risk to taking that drug?

The other issue is that the chronic disease you're treating is often worsened by the medication we're putting someone on. My dad passed some 14 years ago, but he was common of his generation.

Three pack a day smoker, type 2 diabetes, he had a lot of problems. He didn't follow a lotta doctor's advice, But I would argue that maybe some of that advice could have been left unfollowed.

So one example is insulin for his type 2 diabetes. As soon as he got put on insulin, what do you think happened? He gained a ton of weight. He got real hungry and he gained ton a weight and really a lot of systems started to shut down.

Then we were taught, sure, lower the blood sugar. That seems like that would make a logical sense to make this guy better. Long term? Well, again, to me, the whole diabetes picture is a perfect example of where you're missing the target.

Yes, it's important to lower blood sugar, but what's is important is to understand what the process is. Why is the sugar high? So, usually with type 2 diabetes, and type 1 diabetes is obviously a completely different disorder, The issue is not low insulin.

The issues is resistance to the insulin you're making. So what does the body do? It makes more insulin, more, and more. And people don't understand that hypoglycemia, which is caused by too much insulin becomes a risk factor for type 2 diabetes.

Because you keep over producing insulin the bodies going to get resistant to it. Why are they resistant to insulin? I asked that question. You know, none of his treating providers, and you're going to like the best endocrinologists who are doing all the standard stuff.

And none those providers are asking the simple question, could we actually prevent or reverse this? Right. In today's world, I think we know we can with type 2 diabetes, right?

We already know. We know can. Yeah. Well, actually, yeah, not everybody does. Right? But, you know you go on, say, a low-glycemic diet and we start to shed those pounds.

Type 2 Diabetes and Insulin Resistance

that blood sugar begins to normalize. And also you have to think of what's the long-term effect of being hyperinsulinemic for so long. It's a growth hormone.

If it's going to close down the road, 100 other problems. One of my favorite patients, and this was an adult patient, she was in her late 50s or mid-50s when I saw her, And she had a hemoglobin A1c at 12 and a half, right?

So, optimum is less than 5.7, diabetes 6 and 1 half. She was 12.5. Well, if it's over, I think, nine and a half, you're supposed to put somebody on insulin.

And somebody had put her on an insulin, so she was at that high a level. To get her down below eight, she's on 60 or 70 units of insulin a day. That's why she came to see me.

It's like, all I'm doing is, what happened to your dad? I am hungry all the time, starving myself, still gaining weight, and all this other stuff is getting worse.

We got around an entire program. I mean, she changed what she's eating. She started exercising, building lean body mass, taking supplements. And it was two years or three years later, She shed about 40 pounds, A1C gained down to five.

So of course, every time I order blood, work on her to justify the A-1c, I put in type two diabetes, right? So now we're like two-years out and her A 1c has been at five, 5.1. for two, three years at this point.

Off of all insulin, off of drugs, just taking the supplements, diet, lifestyle. And I remember she comes in one day and she goes, Dr. Newt, because now she's getting notices from the health insurance and it has a diagnosis listed.

She goes Dr New, am I still diabetic? because the diagnosis is still there. That is a great question, because technically we define diabetes by your A1C.

So technically, no, you're not diabetic. But the reality is you have that predisposition, and you go back on that same path, then you will be diabetic, so you tell me if you are diabetic or not.

Because in my book, a person who is not a diabetic is someone who could not eat the right stuff, not exercise, and still have a normal blood sugar. And some watching this are gonna say, well, aren't you guys from MAPS?

Like, why are you talking about adult? I know, I'm sorry. But no, but no I think it's relevant because it, you know I

thing one important thing that we learn from understanding root cause medicine is that these things are all interconnected.

So you're coming from Ann Arbor and when you look at what's happening in the upper Midwest and the Rust Belt in terms of Parkinson's research, There's a clear connection being drawn with environmental toxins, heavy metals, and Parkinson's.

When you compare that to, say, autism or any of the conditions we see in the developing grain, I think in this community, we don't view these as separate conditions.

We understand that those root causes are the same for both. Right, I mean you know you cause brain inflammation, neurotoxicity, you're six months old, yeah you are at risk for developing autism or some type of neurodevelopmental delay, seizure disorder, whatever.

If I get exposed at my age of 65, i'm probably not going to develop autism, but I will develop Parkinson's, and I'll develop one of these degenerative neurologic disorders.

They have the same cause and that's the idea behind You know, rather than defining something as autism or Parkinson's, define it as environmental toxicity, cell danger response activation, you know detox issues, whatever the underlying cause is, because then that becomes universal.

And then everything we do at MAPS becomes Universal because it is.

Autism, Parkinson's, and Shared Root Causes

I mean, there's a lot of people that I talk to on Maps and they say, well, I don't see kids. It's like, no, No, You don' understand. If you come to Mapps and learn what we're teaching, then you'll be able to treat anybody.

You can apply it root cause. Yeah. So it's a continuum because think about it, like a two-year-old isn't really going to say develop OCD if they have an inflammatory condition, but they will lose language.

Then that six or eight- year- old, they had language pretty well established, so they'll get the OCTD in the ticks. But then, you go a little further on 16, and you have chronic fatigue, myalgic encephalitis, POTS.

March it out further. You start to get into Alzheimer's and Parkinson's. And if you start think of these all as cell danger response disorders, you begin to realize they're all interlinked.

The beautiful thing, the thing I love the most about pediatrics is you change the life of a two or three year old. you've got 80 years of functional adult that wouldn't have been there without you.

that you really change the world by doing that. And I don't know how you feel about this, but particularly in a world of autism, a lot of these kids, they're the best and the brightest.

That's who's being taken out by autism. So when we recover these, especially these because they become spellers and we realize this is actually a super genius.

We just didn't recognize it because they couldn't speak. Then when they start spelling and you realize the depth of their knowledge and understanding and how intelligent they are, that's the really scary thing.

So imagine you have a two-year-old Einstein that is fading off into autism because of the toxicity or environment, cell danger response, whatever it is, and if you come in and repair that, they grow up to do amazing things.

It's because the work that we're doing here. That's what I love about kids. Yeah, and the other place you can link them is, if you think of all these conditions, a lot of them are movement disorders.

Right. So what we call autism, for a kid who had regression, often is a movement disorder. Never really touched the intellect, but it maybe had some behavioral components, so does Parkinson's.

If Parkinson is the cell danger response, that's a moving disorder, it does have behavioral component too. Pans, pandas, motor tics, Tourette's, another movement You have this really consistent pattern of conditions that are affecting movement across the board.

Not really touching intellect, but they're really affecting function because with the movement, you also get that cycling mind that has a little trouble organizing.

You should be a neurologist. I've heard that before. I just play one on podcasts. Yeah, that was always one of those specialties I was afraid of being a neurologist.

It's too much work, the physical exam's way too long, you gotta have all these toys in the bag. You do it long enough and I carry no equipment and just use my eye.

I get 90% of what I need just from… Oh yeah, no I do too, I mean I can sit there and watch a kid in my office before I eat. I mean, this gets off topic, but I knew I was going to be a neurologist when I as a third year medical student.

I walked into a patient room and it was a guy who was locked into Jerry chair. Yeah. And he was pretty pissed that he there. He actually had his, Johnny was opened in front.

So he's fully exposed, locked in. he grabbed his urinal that was on the side of the chair and he threw it at me. Right. So now I was in that room for about five seconds because I Was dodging urine right when I left the room I came out and I told my resident I think he had a stroke I'm pretty sure that it's a subcortical stroke, right?

Because I noticed that when you reach for the urinal he kind of crossed the side with it You know I's explaining that he has upper motor neuron signs of the opposite contralateral side, but it involved face arm leg equally so it has got to be sub cortical.

My resident looks at me like Where's the EEG? What's wrong with you? Yeah. I threw urine at you. That's how you know. And I kind of knew I was going to be a pediatrician because when I went to my first delivery, as soon as that baby came out, I didn't really care about the problem.

It's hard to admit that. But right away, That's a baby. I want to see the baby I think I was doing OB at the time and of course I'm supposed to focus on this and there's like a there is a Baby over there.

Well, let me from all of us at MAPS. We're really glad you chose to be a pediatric neurologist. It was as simple as that. But now as I get older and I progress, I really think the adult issues become more important and more relevant.

And I start to think MAPS is going to be, there was a little name change because we're not just pediatric. It's the Medical Academy of Pediatrics and Special Needs.

Right. Of course, we all see, a lot of 20 and 30 somethings with special needs. So we are not pediatric, but then I do like to really do think about how Alzheimer's and Parkinson's, and all these chronic conditions, are just part of the same…

Pediatrics, Prevention, and the Future of Medicine

Different manifestations of same problem. Yeah, yeah. You know, you mentioned like raising a healthy kid, You've saved those next 80 years. you're the optimist.

I'm a little more pessimist because I think of it is that if you don't get a health kid you are not going to get healthy adult. Okay, well… I am looking at it from the opposite end.

And just to be selfish, I want functional adults that can have jobs, pay taxes, so I still get my social… I'm of that age, okay? Yeah, I know you need that.

No, you know, all kidding aside, we're headed to a place where we are not going to have a military. We're not gonna have social security system. It's gonna be completely bankrupt because you're gonna not have people that can fill jobs that are needed.

You're going not to be innovators, the movers and shakers. the intellect that you need, the motivation that need. Because I mean, most people that are creating these industries, creating new ideas, they've got some ADD, it's already on the border there, right?

And if you push them too far with toxicity, then they're not going to be functional. And that's what I worry about. But I, you know, getting the social security comment.

I mean, I met a grandmother recently in her seventies working two jobs and working to jobs because her daughter has cancer and her grandson has autism.

And she has to be the caregiver because she, for everybody, she's got to work extra jobs, and care for the grandson, right. I mean, I left that conversation thinking this is everything that's gone wrong.

Well, the world we live in. Yeah, we can expect to spend the next two hours talking about cancer because a lot of that is a toxicity induced. You know, that another cell danger response induced disease.

In a metabolic and inflammatory condition, but we never really grew up thinking of it that way. Yeah. And so I think that to me, that's a frightening place where the grandparents are having to take care of not just their child, The goal here is really that we create a generation of practitioners that understand root cause medicine, have a toolkit that they can use to resolve this stuff, and they create another generation.

And we turn the ship around. I mean, this is, you know, it's like the Titanic, right? It takes a while to… that ship and turn it around. That's why I ran into an iceberg, couldn't turn.

So that's what we need to do with medicine. It's a behemoth. Illness is a huge part of our GDP. You know, so we have to start replacing that and get us to a place where people understand what it means to be healthy and people that they're gonna buy this food versus that food because they want their kids to well.

Yeah, because when the situation changes and the patients we've been seeing over the last years have changed, the landscape has changed. The training has not changed so the way the more traditional training is proceeded is you're the captain of the Titanic and you are just slamming straight forward into that iceberg.

You're not changing course. And what MAPS is doing is it's trying to change the course, redefine the ways we instruct so that we really get at root cause, we get a prevention, We're not reactive, we're proactive, right?

These are all the things that have to happen. And we are hoping our colleagues all come on board to this new model because really the patients have changed, the conditions have change.

The complexity has changed. You know the answer is not the model that we had, it just doesn't work. for what we're seeing now. And again, MAPS does, and that's where bringing people into the fold and convincing, you know, okay, I know it's just, that P is pediatric and special needs.

I mean, how many patients you have that are special leads and all of them. All chronically ill patients that can't get out of bed because they're fatigued or they have pain every day or They have neuropathy or you know some degenerative neurologic disorder they cancer all those things are Manifestations of the same underlying process And when you understand it from that point of view, and you also understand that the best way to treat any of those conditions is don't get it in the first place, right?

Attack that early on, get somebody on the right track, create that resilience, then we don' have to be treating cancer or Parkinson's or ALS or any, you know, even heart disease, that all those things are inflammatory degenerative conditions.

And if we set the ship on right course in first Then we don't have to worry about the iceberg. Yeah. Let's leave on an uplifting note, which is that this thing has grown.

Huge. This thing is exploding. It's not just growing. I'd like to take all the credit, it's got to be my personality. No, no, It is the need. And I think it is just a reflection of the needs.

We are getting louder. People are actually, still to this day, they are what's maps? People have never heard of us. But that's becoming less and less common.

And that's really, you know, the louder our voices, there are people out there that want what we're offering right now. They just don't know about it.

Yeah, because unfortunately, they paid $100,000 a year for medical school and never got any of this. I don' think they had one lecture on the cell danger response.

No. That's a lot of tuition. So we'll be more than happy to supplement that education. Absolutely. We're all about that. Awesome. Well, I appreciate the time.

It's been a great conversation. Thanks. Thanks so much for joining us today. I'm Honey Rinusella, and this is MAPS. As we heal tomorrow's future, we appreciate you joining on the journey.

We'll see you next time.