

Dr. Jill

Your Functional Medicine Expert®
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Podcast:

[#113: Dr. Jill interviews colorectal surgeon, Dr. Brian Jerby on How to Heal Your Gut](#)

Text:

Dr. Jill 00:13

Hello, everyone! Welcome to another episode of Dr. Jill Live! I'm so happy to have you here today and am excited to introduce our guest. I know it'll be a fascinating conversation.

Dr. Jill 0:23

Okay, sorry about that. They're changing how they do the live, so I have this echo as I go. So everybody, bear with me. We're going to get all settled here again, and hopefully you can hear me online. Put your name and comments in the comment section—I'll be checking in there a little bit—where you're from and where you're joining us from.

Dr. Jill 0:49

Today, I want to introduce a special guest who I haven't known very long. But we already found out that we have something in common. We both come from a farm background. Interestingly, I think that frames not only the work ethic and what we do, but the understanding of how the environment, the soils, and the gut microbiome really frame our health and our illness and what we see in clinical practice. So, I'm super excited to learn that about you, Dr. Jerby.

Dr. Jill 1:12

Dr. Jerby is a board-certified colon and rectal surgeon who now dedicates a large part of his practice to treating gastrointestinal conditions from a functional medicine approach. And we're both saying we're conventionally trained, but we've really expanded that view of root cause and everything. And functional medicine is my passion as well. He's particularly interested in and has expertise in gut

microbiome, dysbiosis, small and large intestinal bacterial overgrowth, constipation, fecal incontinence, and cancer, which are all connected.

Dr. Jill 1:44

While still performing surgery when necessary, Dr. Jurby has been very successful in treating and preventing surgery for those with ulcerative colitis, Crohn's disease, diverticulitis, gallbladder disease, and more, offering anal manometry and biofeedback for incontinence and pelvic floor disorders, as well as abdominal massage therapy for abdominal/pelvic adhesions.

Dr. Jill 2:04

I am absolutely honored and excited to have you here and to talk to you. I'd love to start with a little bit about your background. How did you go from the farm into medicine and then to colorectal surgery? Tell us a little about your journey. And then we'll go to, how'd you find functional medicine?

Dr. Brian Jerby 2:20

Yes, well, thanks so much for having me! I'm super excited to meet you and talk to you. To answer your question, I grew up working on a farm in Kansas. I guess my journey started when, as a little kid, I had a transient autoimmune GI disorder that required surgical intervention. That GI surgery that I had was one of my impetuses for going into medicine. Looking back on it, how I was being set up for what I do now was the fact that I did a lot of work on a Kansas wheat farm as a boy. And one of my jobs during the wheat harvest was to drive this big wheat truck full of freshly harvested wheat. We wanted to take it to a grain bin and store it until the market was right for selling it. So my job was as a kid; I didn't even have a driver's license yet. I was 12 or 13 years old. You know how that works.

Dr. Jill 3:49

I do! I was thrown into a truck at 12 as well. My father's like, "Jill, could you just drive it over here to the strawberry farm?" And I was like, "uh"—because they expected, at that age, that you know how to drive.

Dr. Brian Jerby 3:58

Exactly. Yes. So it was one of those [where] you had to do it. So I would back the truck up to this auger and I would lift the bed of the truck and start emptying out the wheat. But before I started augering the wheat into the grain bin, I turned on this humongous 20-gallon jug of malathion, and it sprayed malathion—which is a

pesticide—all over this wheat because we wanted to keep the insects out of the wheat. Well, this was hard red winter wheat, which went directly to a flour mill to be processed into flour to become bread. And I can guarantee you that the wheat was never washed because it would ruin it. And so this malathion that I was spraying on there was also being introduced into people's bread. I didn't realize it then, but that was one of the things that really got me thinking when I became a colon and rectal surgeon,

Dr. Brian Jerby 5:07

I had been practicing for a number of years, and I was seeing more and more and younger and younger patients with surgical GI diseases. I was cutting out colons and small bowels and all kinds of things. And I said, "Isn't there something that's causing this?" I was seeing 30-year-old people with colon and rectal cancer. I mean: "Come on! Something has to be causing this!" We were seeing the rate of colorectal cancer quadruple in people less than 40 years old. So the big question was, "What in the world is causing this?" So that started me on my journey to think, "Wow! It's got to be something in our food." That also helped me remember back to when I was a kid and what I did with the wheat that was transformed into flour, which was transformed into people's bread. So that got me started on this functional medicine journey that has ended up where I am now. I hope that answers your question.

Dr. Jill 6:23

It's an amazing story because it's so relevant to me, too! I grew up on a farm. I saw all this stuff, and at 25, I got breast cancer. I have no doubt that well water, atrazine, and some of the same things contributed. I don't know if you know my story, and we don't need to talk a lot about it. But just to frame this, at 26, right after the chemotherapy, the breast cancer, and the treatment, I was diagnosed with Crohn's disease. So it's no surprise, right? And again, you know how this goes. The doctor said diet has nothing to do with it. He said: "You're going to need surgery, you're going to need lifelong immune-modulating drugs. It's incurable." Well, guess what? I didn't need any of that. I'm off meds. I consider myself cured because I have had no evidence for 20 years.

Dr. Brian Jerby 6:58

That's fantastic!

Dr. Jill 6:59

Right? So I get this so deeply and I'm so passionate and excited to have someone like you sitting here. I mean, truly, I can almost cry with gratitude to have someone who has that surgical background and understanding but also knows this bigger world, because I'm living proof of the power of diet, nutrition, and the microbiome and fixing that. As you so well know, my story is that the chemotherapy clearly caused a permeable gut situation. I have NOD2, which is a high-risk gene that causes an immune reaction to a neural microbiome. So, of course, you know the story. But what's powerful is that my story, and many of your patients': we can heal without surgery and without drugs. I think I took a short course of steroids for a few weeks, and that's the only immune[-suppressing] kind of drug I've ever had in my life. So it's pretty amazing that it's possible.

Dr. Brian Jerby 7:47

Yes, that's fantastic. As you already kind of alluded to, it's all about that gut barrier, how it interacts with your microbiome, and how it interacts with your immune system. The gut is the root of all kinds of diseases, and that's where it really starts. That's where it was a really natural transition for me, from seeing the end disease, which is like terrible intestines all riddled with inflammation, strictures, and the whole mess, then going to the point where I thought, "Wow, we can actually prevent this from getting to this degree and prevent surgery." And so I still do some surgery, but I really have devoted my time to prevent the need for surgery. And it's really been super satisfying for me.

Dr. Jill 8:55

Yes, what a powerful thing with your background, because you've seen the physiology, you've seen the anatomy of what happens. And then what you did that not everybody does is ask the question, "Well, why?" For me, too. It's like when we start to ask the questions... We went into medicine to help people heal, right? Then we go down this path, and sometimes we forget our beginnings. But the true beginning is like: Why does disease happen? What happened here? How can we reverse it? And granted, surgery has its place. It's a lifesaver. But then again, some of these cases...

Dr. Jill 9:23

So you mentioned something that I found fascinating. And again, with my knowledge of functional medicine, that permeability, we call it intestinal hyperpermeability—it's been called 'leaky gut' in layman's terms—but for a long time, especially in your field, there wasn't a lot of respect for that term or even

acknowledgment that it existed. Do you feel like that's shifting a little among your colleagues, acknowledging that it actually does exist and does contribute to disease? Tell me a little about your journey, because again, that's been a hard sell for conventional medicine.

Dr. Brian Jerby 9:56

Yes, I'm totally with you there. It was one of those terms that was like, "Yeah, leaky gut, like that really exists!" But interestingly, when I was a resident in the 90s, I did a lot of work in the trauma ICUs. And we were seeing these people come in with injuries; all they had was a severe closed-head injury—no abdominal trauma, no other trauma—just a bad knock on the head. And three days later, they spike a fever, we do blood cultures, and their GI bacteria are now in their blood. So we were calling that bacterial translocation. Of course, that's to the nth degree. But what we didn't embrace was the fact that this happens to varying degrees.

Dr. Brian Jerby 10:52

Obviously, when you're in the intensive care unit and whole bacteria show up in your blood, that's kind of the worst possible scenario. To a lesser degree, that sort of thing is going on in people walking around on the street. But it's more like the translocation of bacterial pieces and parts activating the immune system and causing this inflammatory response. The whole big picture is what's commonly known as 'leaky gut,' or what we like to call 'increased intestinal permeability,' because it sounds more medical.

Dr. Jill 11:31

Yes, exactly.

Dr. Brian Jerby 10:52

But it's the same idea. And we were seeing it back then. But we didn't put two and two together because we only thought it happened to severely traumatized people. But with traumas like some of the stuff we're exposed to in our environment, those things are going on to a lesser degree. Yes, the same thing is happening, but it's not putting you in the intensive care unit. It's just slowly—can I use this term?—it's slowly killing you, and not quickly as it could happen in the ICU. So inflammation starts, and as you know, inflammation is the root of all kinds of evil. Those are the kinds of things that we're seeing as chronic diseases in our society today, and that's what we're out to stop.

Dr. Jill 12:32

Yes. First of all, I love that analogy. And you're right, I've always thought the same thing with sepsis. Not always, but many times in the ICU, when someone is severely ill—especially, like you said, with head trauma, but even postsurgical—that sepsis is coming from the gut. It actually, literally is. So, same as you, I've been like, "Wait a second, we've known this from residency." We've seen it; it's not new, but we just haven't thought about it in that realm. And I think as a role gets more toxic, and as the soils change, and the microbiome changes we're getting more and more changes that affect that permeability, and then cause dumping and immune activation. And we know now that lipopolysaccharide and that endotoxic effect is en route with obesity, diabetes, and heart disease—it's way further than just the gut.

Dr. Jill 13:17

Let's say someone like myself would come in, in their 20s or 30s with Crohn's. Maybe they're stable, maybe they're not. Probably, like you, they've needed [medications just as] I used medication to stabilize. But how would you look at them from a functional perspective that might be different from just meds and surgery? Would you look at their gut microbiome? What would you do with a patient with an inflammatory bowel in the beginning?

Dr. Brian Jerby 13:37

Yes, that's a great question because that's one of the things that I really have focused on. We see a lot of inflammatory bowel disease patients. What I tell them is that in conventional medicine, they have one tool in the toolbox. And of course, if you've got one tool in the toolbox, if there's a problem, what tool are you going to use? You're going to use that one tool, which is some sort of anti-inflammatory pharmaceutical. That's all well and good; those things can be very helpful. But they don't address all of the other needs when it comes to inflammatory bowel disease. So when I see an inflammatory bowel disease patient, whether or not they're on steroids, a biologic, or whatever they might be on, I tell them, "Look, we need to cover all these other bases," which includes: "Hey, let's look at your microbiome. Let's make sure you don't have pathogenic bacteria that are causing part of your problem. Let's make sure that your commensal bacteria—we're working on getting them back into balance because typically in inflammatory bowel disease, the immune system attacks the good bacteria and leaves the bad or pathogenic bacteria to have their way in a person's gut."

Dr. Brian Jerby 15:12

So we definitely want to look at the microbiome. There's no perfect way of doing that just for our listeners, but we take what we can get. And that's the best way to do that with the least invasive method is through a comprehensive stool analysis. That can tell us a lot of things, because not only do we want to know about the balance of the good bacteria versus the 'bad bacteria,' but we also want to know how well a person is digesting and absorbing, because if they're not digesting and absorbing, then they're going to be losing out on nutrients, which can make them sicker. They're going to be leaving nutrients in the lumen, or the space of the gut, which is just more food for the bad bacteria. Plus, undigested food can also cause worsening diarrhea, abdominal pain, bloating, etc. So we look at that.

Dr. Brian Jerby 16:16

We look at inflammatory markers to make sure that we know what the levels are because we can follow that to see if people's inflammation is getting better. We want to make sure they don't have parasites. It's rare, but every once in a while we will see one and it can make a difference in some cases. Let's say you have good gut bacteria. Well, one of the jobs of good gut bacteria is to make things like short-chain fatty acids. And short-chain fatty acids, of course, are super important to the health of the gut lining. So we want to know what the short-chain fatty acid levels are. That's a great thing about some of the functional medicine testing is that there's one test that can tell us just about everything that we want to know about what's going on, at least in the colon. It's not perfect for the small bowel, but it gives us a pretty doggone good idea. There is no perfect test. So we take the clues, the information, and the evidence and we put them all together, and we come up with a more comprehensive approach to inflammatory bowel disease.

Dr. Brian Jerby 17:42

We try to help people; we come alongside them if they want to stay on their biologic or their steroid [medication]. Well, obviously, we're going to want to get them off their steroid [medication] because you don't want to be on that long term. But let's say a person wants to stay on their biologic [medication]—well, fine. We'll come in, pull alongside, drive parallel with the conventional medicine approach and help that work better. If they want to try to get off of their biologic [medication], we can help facilitate that. If they come in and they haven't been on a biologic [medication] yet and they're trying to prevent going on one, we can help them do that. So we try to meet them where they are and cover all the bases that conventional medicine really doesn't address, including diet, as you said. Your doctor said, "Oh, yes, it doesn't matter what you eat, food makes no difference." Well, wrong!

Dr. Jill 18:38

Right. And it's funny now that I've got full studies that show Crohn's and diet do. For me back 20 years ago, a specific carbohydrate diet was what I ran into. For me, it helped. And unbeknownst to you—you'll get this. It's funny. I'll just tell you a few of the things that he helped me to heal—all that you just said. So this is a clinical case, real life. I had hypochlorhydria—probably from a very young age—zinc deficiency, and pretty severe pancreatic insufficiency. So that was all contributing to an overgrowth in the small bowel of both fungus, *Saccharomyces cerevisiae*, and bacteria. I had to treat that SIBO and SIFO, that bacteria and fungal load. I had a little dysbiosis. *Klebsiella* was there. Then I had to add back: pancreatic enzyme and hydrochloric acid. And then the same thing: short-chain fatty acids were low. So I took butyrate as a supplement and ate foods with butyrate. But that diet was probably the biggest change because I went from [being] a vegetarian, not knowing any better, I was more of a carbitarian. I had gluten in my diet, and I have high-risk genes. I was never formally diagnosed with celiac; I may or may not have had it. But either way, [cutting] the gluten out of my diet made a big difference. So just like what you said, I went through all those things in my own body. Now, you mentioned the comprehensive stool [test]. I love that. I do that the same way. Are you doing much breath testing for small intestinal bacterial overgrowth? Or any thoughts on that?

Dr. Brian Jerby 19:56

Yes. In the context of IBD or just in general?

Dr. Jill 20:00

Really, any patient that comes in with gut issues and symptoms. I know it's so common—with IBS actually more, right?

Dr. Brian Jerby 20:06

Yes. Studies show that maybe one in five people with IBD also has bacterial overgrowth. But more often, the people that I see are trying to function. They struggle with bloating every day or bowel movement irregularities. So, yes, just about everyone in that scenario is going to get a breath test. And again, breath tests aren't perfect. But breath tests are important because not only do they tell you which gas is being overproduced, but they can also give you an idea of how much treatment a person is going to need. So different gases get different treatments as you know. I'm not telling you anything you don't know, but just for the listeners' sake. Otherwise, you're just guessing. And I can't tell you how many people come to me that have been treated with Xifaxan, or whatever, without a breath test. And

then we do a breath test and find out that it was the exact wrong treatment or an incomplete treatment.

Dr. Brian Jerby 21:23

And so for you listeners out there, Dr. Jill would agree with me that you really need to do a breath test so that we get more precise on what we're treating if you have SIBO, or intestinal methanogen overgrowth, or whatever it is. But yes, that's the long answer to your short question. We do a lot of breath testing. We see a lot of SIBO. And we offer a more comprehensive approach than standard, maybe conventional medicine does, because not only do we treat the bacterial overgrowth, but we also offer a comprehensive approach to try to prevent it from coming back by addressing the root cause and optimizing the microbiome and all those things that are necessary for a comprehensive approach. And I'm sure you see a good bit of that in your practice, too.

Dr. Jill 22:21

I do. Yes, I still do. I loved what you said because it really is that. And what we see is the same thing; a lot of conventional doctors might do a breath test or might not and just give Xifaxan. But if you don't address the root cause, which you mentioned, the pancreas, the stomach acid, the motility is huge—all of those things have to be addressed. And then, as you mentioned, most breath tests do both hydrogen and methane. There's a newer test now that does hydrogen sulfide. But those are the big three and it's super common to have something like methane and then just like Xifaxan alone won't treat it. Typically, I use meds as well, but do you use all meds or some herbs? Or do you do some of both when you're treating SIBO? Or what's your preference?

Dr. Brian Jerby 23:01

Yes, that's what I tell my patients. I say: "You know, the great thing about what I do, at least in my opinion, is that we have all options available." So we use pharmaceuticals. I love rifaximin. I think it's just this amazing antibiotic because it's not absorbed to a significant degree. It only works in the gut. And the studies show that it actually supports the commensal bacteria while it knocks down the overgrowth, which is just outstanding.

Dr. Jill 23:35

We didn't have that years ago, like when I went to medical school. I agree with you. I want to say this because a lot of people are afraid of antibiotics. I feel very

differently about rifaximin and I use it just like you, frequently, because I feel like we get a great result without a lot of harm to the microbiome.

Dr. Brian Jerby 23:50

Exactly, yes. We have all the pharmaceutical availability as well as herbal. I use a lot of herbals. And then we'll do the elemental diet sometimes. People aren't crazy about it, even though some others have said, "Hey, be more positive about the elemental diet!" But I just think of myself trying to do an elemental diet. I would only do it if something else hadn't worked, so that's what I do for my patients. I'll bring that in as an option if, let's say, my herbal protocol or my pharmaceutical protocol hasn't been as effective as I wanted. But I'll also do a hybrid, as you were implying that you can also use a pharmaceutical plus an herbal. That's what's so great about what we do, is that we've got all the options. Conventional pretty much just does pharmaceuticals. Naturopaths—not all of them, but a lot of them—just do herbals. Nutritional practices just do elemental. But we do all [of them].

Dr. Jill 25:12

I couldn't agree more. I love that because often I'll do it. Usually, the antibiotic is no more than two weeks. Although you did allude to—you probably like me—if the hydrogen is really high, someone has to go for 30 days. I have kind of a cutoff. I'd love to get your opinion. I think around 20 or 30 units of hydrogen—[ppm]—is a good [level]. Let's say it's 60. Would you go longer than two weeks?

Dr. Brian Jerby 25:35

Yes, I'm not opposed to going three weeks with rifaximin if the hydrogen [level] is super high. Studies suggest that you can drop it by 30 to 40 points with a two-week course. But I go a lot on how the patient's feeling. So if they hit like 80% or 90% improvement in symptoms, then I move on. But if they haven't hit that, I either repeat the breath test or go a little bit longer with the treatment or even sometimes change it up from a pharmaceutical to an herbal because I say: "You know what? The pharmaceutical is like a right jab and the herbal are like a left hook. We're hitting it from both directions, and if we hit it from all directions, then we'll knock it out."

Dr. Jill 26:23

I love it. And I couldn't agree more. Sometimes I'll do the antibiotic rifaximin, plus, right after that, we'll start an eight-week herbal course or something like that. And like you said, I check in with the patient: "What do you prefer? How do we do this? How are you improving?" And what's really great—fungus and yeast are hard to

detect and can be coexistent—and if that's there, the herbals by far tend to do a better job because often those herbs [such as] berberine, folic acid, oregano, etc., cover both. I'm sure you found that as well.

Dr. Brian Jerby 26:54

Exactly, yes. As you say, there's a significant percentage of folks that have those coexisting, both SIBO and SIFO, which for the listeners is small intestinal fungal overgrowth. That can be a bad combination that can be really tough. It's really hard to nail down SIFO—you almost have to go on a clinical feeling. But it can get both of them. I do like to come back with an herbal protocol just in case you've got a little bit more bacterial work to do but still haven't addressed fungus.

Dr. Jill 27:37

I love that you mentioned that because that's what I have been talking about for years. I think the suspicion of fungus has to be high because, again, in medical school, we're almost taught that it doesn't exist, except we know better. And even if it's not systemic sepsis from fungus, it can be there and be very significant in the patients' lives. But like you said, whether it's the antibodies in the blood, the stool test, or organic acids, you can do a lot of tests and still not find it. The massive symptoms I've seen: the yeast, the cravings for sugar, and brain fog. It's interesting that yeast produces a product called acetaldehyde. It's the same thing [you get] from alcohol after a hangover. So it's almost like they've been hungover. I love that you said that though, because it is hard to detect. That's why, conventionally, we're not taught [about it] because it's hard to find. But if you're looking for it, you and I see it all the time. And it is relevant because they don't get better if you just treat one side when they have both.

Dr. Brian Jerby 28:29

Exactly, yes. In this day of not doing physical exams, I still think a physical exam is more important because I can't tell you how many times just the physical exam itself greatly raised the suspicion of having coexisting SIFO or even SIBO by itself. I see some kids and there's a number of times in the recent past where I'm talking to the mom and I'm not thinking it's a bacterial overgrowth. Then I examined the child and tap around on their tummy and there's a good bit of gas in there and there's some distention that you wouldn't otherwise detect and, lo and behold, we do a breath test on this eight or nine-year-old and, sure enough, they've got a bacterial overgrowth. So, the physical exam is an important part. I try to do at least one exam on people and encourage them to drive to see me. If they're coming from long distances, sometimes that's not possible. But then I say, "Look, go to your primary

care physician and have them lay hands on your belly." I tell people: "I'm like a medical detective. I'm going into a crime scene, which is the medical condition and I'm trying to gather clues from all these different areas. Then I put all the clues together and come up with a 'who-done-it' sort of thing." Sometimes fungus is the 'who done it,' sometimes it's not. But you've got to have a high index of suspicion.

Dr. Jill 30:30

I love that you said that because, again, conventionally we aren't taught to look very far for that. And just very, very specific: I find white coating on the tongue. So if you're listening, look in the mirror [to see] if you have a real white, white coating on your tongue. It could be fungus. If you're hypothyroid and untreated, that can contribute to SIBO or fungal overgrowth because just that slight bit of decrease in temperature in your body will allow for the proliferation of yeast and fungus, and also the motility is lacking. You need good motility in the small bowel to prevent this from happening. I always joke about it. Like in hockey, the Zamboni that goes between the periods on the ice, it's kind of like the migrating motor complex in the gut. And if that's not working, you're going to have this stagnation overgrowth of bacteria or yeast in the gut, which is why you mentioned all these other things that we think about.

Dr. Jill 31:15

We talked a little about Crohn's and your approach, in which, again, you look at the microbiome. Is there anything different with ulcerative colitis?—because they're very similar. They're in the same IBD, but they do present a little differently. Is there anything different you would do with the ulcerative colitis patient versus the Crohn's [patient]?

Dr. Brian Jerby 31:29

Yes, and also with colitis, I'm always looking for hydrogen sulfide because it's a big player in ulcerative colitis. That's where I think, again, that comprehensive stool analysis comes in because the stool analysis is going to tell you about the microbiome, mainly, of the colon. Let's face it. But I can't tell you how many times I look at the microbiome of a person who I either suspect has ulcerative colitis or has been definitively diagnosed [with it]. And they have an overgrowth of a particular species. It's a sulfate-reducing bacteria called *Desulfovibrio piger*—you know, that one on the stool analysis. That one really makes hydrogen sulfide. And hydrogen sulfide, if the concentration is high enough, is pro-inflammatory. It creates inflammation. Just controlling that particular organism when it's overgrown can make a huge difference in the clinical setting of how people are doing and their

symptoms. I definitely always look for that. I don't see it so much in Crohn's. But with ulcerative colitis (UC), that's a big difference. And, of course, with both Crohn's and UC, we're instituting dietary precautions and sometimes even putting them [on]—if they have a flare—an elemental diet for two or three weeks if they're willing to do that. It can make a huge difference as well in cooling down that flare. That's been corroborated by a number of clinical studies, mainly coming out of Europe.

Dr. Jill 33:27

Right. And like you said, the evidence is actually really good for elemental diets. It's just that it's inconvenient to patients; they don't always like it. So it's not that they're lacking evidence on that. I love that you mentioned that because it is a great option. And for those of you listening, there are commercial formulas out there. But there are also a couple of nutritional companies that make them. There is on the web a naturopath—Siebecker—who has created a homemade elemental diet. So that's a place to look. I think it's siboinfo.com.

Dr. Brian Jerby 33:55

Yes, I think that's hers. Right.

Dr. Jill 34:00

You know Allison, probably too. I've been listening to some of the people who know a lot more than me about the hydrogen treatments. I'd love to hear your thoughts, and I can share some of the things I've heard, because I feel like it's a harder thing to treat than the methane or the hydrogen. Any successes with the kinds of meds or herbs that you use for hydrogen sulfide?

Dr. Brian Jerby 34:21

Yes, you're right. It's a toughy. And let's face it, we don't have a whole lot of clinical data. It's one of those things that we've known it's been around but we haven't studied it as much as probably needed. There is a hydrogen sulfide study group that is collecting data, and the data shows that the clinical scenario is all over the place. It's not just diarrhea. But for the ones that I've done—like a trio-smart, which tests all three of the gases that you mentioned—and I have a definitive elevation of hydrogen sulfide, the things that I've found effective are: I have treated it with rifaximin, but I add bismuth, which is Pepto Bismol essentially. Or you can get a compounded version of bismuth as well, which is probably more effective. But anyway, it's expensive and Pepto Bismol is a lot cheaper. But the combination of those two, I've had success with. On the herbal side, I've had success with high-dose oregano, where you really hit it with high doses. Some people don't

tolerate that very well. So you've got to be careful, but I have had some clinical success with that as well.

Dr. Brian Jerby 35:59

There are other treatments out there. You could use the elemental diet. I haven't done that yet because, in my practice, hydrogen sulfide is a fraction of hydrogen SIBO and intestinal methanogen overgrowth. So I don't see it that much. But when I do see it, those are the things that worked: rifaximin and Pepto Bismol or bismuth, and high-dose oregano. I use A.D.P., which is an emulsified tablet. So you're talking five tablets, which is 250 milligrams three times a day, which is a ton. I mean, you'd probably smell like a pizza shop.

Dr. Jill 36:53

I love that you say that that's exactly my experience. And there are some studies out there with blastocystis, which is a protozoan that is probably the most common. If we do see parasites, that's the one we do [see]. And it's that exact brand that was studied, and it was three to four, three times a day, and that was back 10 years ago. I used to think that was so high. But same as you, that stuff is really effective if you go high enough. And because it's enteric coated, people do not always tolerate it, but it's better than at least the oil if you were doing drops. You would definitely smell like pizza.

Dr. Jill 37:23

I heard a little bit about uva ursi and silver. I don't use a lot of silver in clinical practice. So who knows? The uva ursi, I sometimes will just add it to the regimen; I don't feel like it's enough [on its own]. But I love that you're saying that because bismuth is really a key too, I think. Interestingly, sometimes we'll see in the stool, someone who has H. pylori, then hydrogen SIBO. Bismuth tends to be really good at preventing H. pylori from adhering to the stomach. So that's a nice thing if you have two things to be able to use for both—a combination.

Dr. Jill 37:50

This is fantastic! You also talked about motility disorders like constipation, because that's a big deal. And I'm sure that you treat a lot of methane SIBO that's [from] constipation; that's a root cause. But say you've treated methane SIBO and you're having trouble getting that level down. What other tips, tricks, or things do you do for chronic constipation?

Dr. Brian Jerby 38:15

So you're saying, they either don't have methane SIBO or that they had it, you treated it and it's gone but they still have constipation?

Dr. Jill 38:27

Yes, because maybe our listeners don't know this, but methane SIBO is clearly related to constipation. So let's start there. What would you do to treat the methane SIBO? And then if it doesn't resolve, what would you do for constipation?

Dr. Brian Jerby 38:38

Yes, I see methane all the time. One of the things that methane does is cause constipation. But it also, in my experience, causes a lot of neurologic symptoms—people are just miserable. They have a fair amount of pain, usually on the right side. That's not a hard and fast rule, but that's my experience. And a lot of them also have coexisting fungal overgrowth because there's some evidence that the fungus and the methane-producing organisms have a symbiotic relationship.

Dr. Brian Jerby 39:24

To go back to your question, again, the methane-producing organisms are not technically bacteria; they're more primitive organisms. I'm not telling Dr. Jill anything she doesn't already know; I'm telling you, the listeners out there: antibiotics are designed for bacteria. But if we've got a more primitive organism, antibiotics will work, but you've just got to pound it harder. For a hydrogen-producing organism, you might just have to flick it. But with a methane-producing organism, you've got to take a sledgehammer and beat it to death to get rid of it. So that's why we generally use two agents instead of just one. So, rifaximin plus Neomycin—those are two pharmaceutical antibiotics. Or, on the herbal side, like you've already mentioned, I'll use a fair amount of berberine or oregano, because I can use those in high doses. And I'll add allicin to that, which is an extract of garlic. People that have SIBO are like: "Garlic?! You're going to treat me with garlic?" I tell them: "Look, it's the antibiotic extract from garlic; it has none of the carbohydrates that cause gut disruption in the presence of SIBO. So it's not going to have the same effects and it doesn't make you smell like garlic or anything like that if the extract is pure." The one that I use is pure, but it's expensive, and it works. It'd be better to use something that works and pay a little extra than to get something that doesn't work and then you're in the same place.

Dr. Brian Jerby 41:19

Then I'll also use combo—kind of hybrids. I just prescribed today for a 19-year-old young person a combination of rifaximin and allicin because I didn't think that they would do well with neomycin. Neomycin can be a little hard to tolerate for some people. But those are my go-tos. There are other regimens, but when you find something that works, you want to stick with it and only switch if it's not working. I'm sure that's your experience, too.

Dr. Jill [42:03](#)

Yes, I love that. I couldn't agree more. Everything you said, I totally would do the same. And then that constipation: you've treated the methane SIBO, you've looked at other things, but what else do you do for chronic constipation?

Dr. Brian Jerby [42:16](#)

Sure, yes. When I'm looking at chronic constipation, there are three things to think about. Number one, the colon doesn't propel the waste material along its path. And so we call that dysmotility, slow transit constipation, or even colonic atony. So, no motility is one thing. And then let's say the motility is fine but everything gets kind of jammed up at the outlet, that's called pelvic floor disorder or outlet obstruction. So the colon might be working fine, but once it gets over to the rectum, the muscles of the pelvic floor don't work right and you can't empty. So that's another kind of constipation that needs to be addressed. And then the worst is a combination of both of those, which would be bad motility: the colon doesn't propel things through, but when it finally does get it down there, you can't empty it very well. That's a bad combination.

Dr. Brian Jerby [43:36](#)

Let's just say we've done a test and we found out that the colon motility is not where it should be. Well, that opens a whole can of worms because that could be from a number of different root causes, not the least of which is autonomic disorder, vagus nerve dysfunction, or even intrinsic dysfunction of the colonic cells not contracting properly. It's hard to distinguish between all those, so if I'm suspicious of that, I will come at it from all angles. I'll do some vagus nerve stimulation. I'll try to promote motility, which we can promote with either pharmaceuticals or herbals. Some pharmaceuticals work great for some people, and for some, they don't. And some herbals work great for people, and for some they don't. So you've just got to find which one works.

Dr. Brian Jerby [44:52](#)

I like ginger-based prokinetics. But some people can't tolerate those from an herbal standpoint. I also like Prucalopride, which is a pharmaceutical that's fortunately available once again in the US over the past couple of years. I use it a lot. So I'll use that and I'll use abdominal massage. I don't use a whole lot of Amitiza or Trulance or some of those agents because I've found that they either give people diarrhea, which is just going from out of the frying pan into the fire sort of thing. Or they work for a little while, and then they totally lose their effectiveness and you've got to keep going through all these different medications, and then you're out of options. So I don't usually use those too much. They can be okay in the short term. Those are the different approaches.

Dr. Brian Jerby 46:13

But then let's say a person has pelvic floor disorder. Then we'll do anal rectal manometry to prove that their muscles are not relaxing when they're supposed to relax, and they're relaxing when they're not supposed to relax. So they're totally backwards; they're paradoxical. Those people will greatly benefit from biofeedback, which we do in our office. And we do some retraining of the pelvic floor muscles, which studies have shown again that that's a big winner for outlet obstruction constipation. And then when you've got a combination of the two, it makes it more complicated, but you do both.

Dr. Jill 47:04

Got it, yes. That's super helpful because, again, I think it can be more and more of an issue as we're less mobile or as we have more toxic load or more dysbiosis. And again, from a toxicity perspective, if you're retaining stool, you're just reabsorbing massive amounts of toxins. I want to let you go and honor your time. But one last thing I want to talk about, and we can make it brief: gallbladder disease. This is opening a whole can of worms, but obviously, it's super common to have issues with the gallbladder and infection, inflammation, and all that. You did mention that sometimes you can prevent surgery. I'm assuming if it's not totally inflamed and infected, there's just some dysfunction. What are some little tips about what you think about with gallbladder issues and where do you go with that? Again, maybe opening a can of worms, but I'd love to just touch on it briefly.

Dr. Brian Jerby 47:53

Yes, well, I'm going to give you my suspicion. I would love to do a study sometime and prove it. But I think that many gallbladders could be saved if we would control methane-producing organisms in the gut because not only does methane slow down the gut, but it also slows down gallbladder emptying. For all the people that

have their gallbladders out because they had gallbladder dyskinesias—which means that the gallbladder doesn't squeeze efficiently and empty the bile out of the gallbladder—those people probably had methane. So if somebody comes to me and says, "Hey, they're wanting me to get my gallbladder out because it's not contracting right." I say, "Before you do that, let's make sure we know your methane status." So that is my first go-to if we're trying to save somebody's gallbladder. And there are other things to do, but that's just in a nutshell.

Dr. Jill 49:00

That makes so much sense. And just for the listeners, the bile that's stored in the gallbladder and excreted is a sterilization way to help the small bowel stay healthy. So part of this is actually contributing to the overgrowth of bacteria. If your gallbladder is not working it's... And from my perspective with mold and toxins, it's also a storage for cholesterol and toxins. So a lot happens in the gallbladder that we don't acknowledge. It's such a huge piece of the puzzle. Wow, this has been an absolutely great wealth of knowledge. I know people are commenting and already saying that they appreciate this. Where can people find you, and are you taking new patients? Tell us a little about where to find you.

Dr. Brian Jerby 49:36

Yes, we're taking new patients, and you can find me, Dr. Jerby, at drjrby.com. If folks are interested, they can set up a phone consultation to see if they feel like our practice is a good fit for them. I find that to be very helpful. But yes, feel free to check that out. And if you want a phone consultation, you can set that up too.

Dr. Jill 50:03

Fantastic! Like I said, I'm truly honored because I always feel like someone with your expertise, and then you've expanded this toolbox. You're a rarity. You're a gift because it's so important to give the root cause, yet a lot of doctors are going straight to surgery. There's nothing wrong with surgery. But I love, love, love that you've expanded your toolbox and that you've shared your wisdom with us today. So, thank you so much for coming on!

Dr. Brian Jerby 50:26

Yes, thanks so much for having me. It's been great!