Proven Methods of Diagnosis and Treatment with Medical and Scientific Evidence for Patients Affected by Molds/Mycotoxins

Dr. Eric Gordon, M.D. interviewing Andrew Campbell, M.D.

Dr. Eric Gordon:
So good morning, welcome again, to another episode of Mycotoxins and Chronic Illnesses. Today it is a real pleasure and honor to be interviewing Dr. Andrew Campbell. Dr. Campbell is an editor of, and a clinician. I think he's a amazing clinician. He's been in this field since the late eighties and he has been the medical director of the, I think it's the Immune, and what was the name of your clinic in Houston? I know longer, you're no longer-

Andrew Campbell:
The Center for Immune & Toxic Disorders.

Dr. Eric Gordon:
Center for Immune and Functional Disorders. And he's just, he's published over 90 studies in peer-reviewed medical journals and chapters in medical textbooks. He's received many awards from organizations both national, international. He is currently the Medical Director of MyMycoLab and he has demonstrated success in treating the most complex patients with mold and mycotoxins from environmental and toxic exposures.

Dr. Campbell also lectures regularly at national and international conferences, and it is a honor to have him with us today. Just before we got started, we were chatting a little bit and I was learning some very interesting things. So I think we're gonna start with asking Dr.

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Campbell, how you got involved in the mold business. I know that it was the mold to toxins, but you sounded like you had an interesting story. So,

Andrew Campbell:
I started seeing in Houston, a lot of women who had similar complaints, whether they were young or old, tall or short, didn't matter, they all had similar complaints. And back before the days of computers, I'd sit after hours in the office and go through their charts and try to find what was the commonality and it struck me that they had silicone breast implants. So then I started looking for other doctors and this is when you call from one town to the next, or one city to the next and had a long distance charges, for those of you who remember those kind of things.

But the point being that there was a, it was a pioneering thing.I ran into a few doctors that didn't know and we shared the same concerns, et cetera. Finally, we found a good lab to help us with diagnosis. And then women would naturally, because they were quite ill, would get the implants removed, but they only got marginally better, maybe 20% or so, the other 80% of symptoms persisted.

So then eventually in looking for the answer and solution to that, I found a doctor, a PhD in Canada, Dr. Pierre Blais, I was educated in Switzerland on the French side, so he spoke French, so we got along super and in French. And he told me that the implants that he got, because he was an expert on all implantable medical devices including hip implants, knee implants, all kinds of, TMJ implants, so on and so forth. He said that inside the silicone breast implants had mold growing in them.

And I asked him, "How could they possibly have mold growing in them, in modern manufacturing plants?" He says, "They're not that modern and it's during the manufacturing process the mold gets into them." So then I started the women, I started

giving them antifungal medication and lo and behold, the clouds parted and the sun starts shining through and they got better and they got well.

Dr. Eric Gordon:
Wow.

Andrew Campbell:
Then, and during all of that, this took a few years, five, six years. And during every step, I and a group of other doctors would publish our findings. We have about 25 or so studies that were published on breast implants. And then the result was that people started coming to see me saying you helped my aunt, my sister, my grandmother, my mother, my neighbor who had breast implants, because they had mold. We have mold in our home and we're sick, can you help us? So again, looking for a good lab to help diagnose and examine these patients carefully and came out with some solutions for them.

One thing I learned is that one size doesn't fit all in molds and mycotoxins and there's all kinds of manifestations. And again, another 25 or so publications on molds and mycotoxins and how to treat them, how to diagnose, how to best help the variety of symptoms and patients there are. And it's still a struggle to try and get a lot of doctors to believe in this, because it mimics so many other disorders and diseases, chronic fatigue syndrome, fibromyalgia, et cetera, et cetera and so doctors think that it's something else, rather than due to molds and mycotoxins.

Dr. Eric Gordon:
Yeah, and the individual sensitivity to them, I think is what makes it so difficult to get doctors to, we do really well when everyone acts the same, my simple analogy is nobody argues about the effect of a bullet wound, but when you have something like mold and mycotoxin, which many of us can tolerate with minimal effects and other people it's

devastating. And I think that's where we get into trouble. Doctors want everybody to act the same.

Andrew Campbell:
It makes it simpler for them. But the point is that everybody's immune system is unique and different, like a fingerprint. So as a result, you get these variances in people and some people are in the same household, you have mold in the same household, And one person is very ill and the other person is somewhat ill.

Dr. Eric Gordon:
Yeah and that is what makes so much of the strain, there are so many families that are ripped apart, because it's really easy to decide that the other person is quote unquote neurotic, or secondary gain, or all those wonderful psychological diagnoses that we like to put on things we don't understand. It is terrible, but what's fascinating to me about these, the mold and mycotoxins is that story and talking to you, it's just reinforcing something that's like, I'm almost embarrassed because remember back in the eighties, when Dr. Crook, and we were talking about Candida, we always have paid attention to that, but it just amazes me that we didn't, at least I didn't, realize the full magnitude of molds and mycotoxins really, it's been a slow burn.

Over the last 15 years we started doing more and more, but it's, I don't know, it just seems like it took the last five years to go, boom, this is, what's often stopping people, you write about chronic Lyme and that's something that I've been treating for 20 years. And, it's so true that that is the overlap, and there's some people feel that you need that the Lyme is in fact what maybe potentially, like affects the immune system to make mycotoxins in one population, more sensitive to the mycotoxins. But, tell me more about, before I go off into my world, tell me more about your experience with treating mycotoxins in molds. I mean, you've had a lot of it, so...

Andrew Campbell:
I've seen, and I've seen over 14,000, none of them come to see me first. They've all been to all kinds of different specialists. They've even been told to go see a psychiatrist, many of them, et cetera. And then they come see me. They bring this many medical records, a shopping bag full of pills and prescriptions they've taken none of which have worked. And then my average time with a new patient is a couple of hours, one to two hours. These are not simple patients to take care of. You can't take care of this in the usual 12 minutes that insurance companies feel that is all that is needed.

So then and I'm glad you brought Dr. Crook's Candida back into the picture, because that's where some of us started cutting our teeth, so to speak. And one of the things about that, that's very interesting, and today is that mycotoxins are known to suppress the immune system. Well, 50% of people carry on them, some Candida and it's held in check by the immune system. But when your immune system is suppressed, now Candida can do whatever it wants, a little more, it can become more invasive.

And so you give them Fluconazole, which Candida being a yeast, Fluconazole is great for yeast, and they start feeling better and then you've got to switch to, because you've gotten rid of the Candida, that's when you switched to say, Itraconazole, to get rid of the mold that's causing the issues with these patients. And of course, a lot of studies show that the majority of patients have brain issues, brain fog, short-term memory loss, sleep disturbance, personality changes, et cetera, et cetera, because the first place that is hit by mycotoxins is the brain, the other is the lungs and there's good studies showing these.

Dr. Eric Gordon:
- Right, the brain. I mean, while we're on that do you feel that there is a significant carriage in the nose and sinuses? Is that something in your experience?

Andrew Campbell:
Well, Dr. Ponikau, who was Chairman of Department of ENT Surgery at Mayo, wrote a really good study at 1999, where he took 210 patients with chronic rhinosinusitis, dug up into their sinuses, took a lot of them to the OR, dug stuff out and sent it to the lab. 96% of those patients had mold. So we know they grow in your sinuses, and then what, they produce mycotoxins. And so what happens is the mycotoxins crawl up through the first cranial nerve, which is the olfactory nerve, right pass through the cribriform plate, get into the nerve and get into the brain. And the interesting part of that is that I think that what Dr Ponikau showed is that you get the mold on the tissue of the sinuses and it causes an inflammatory reaction. The sinuses create a lot of mucus and so you've got this chronic runny, stuffy nose and then on top of the mucus grows bacteria. So the typical ENT will give a decongestant and an antibiotic and the patient will get better for a couple of months. And then it's right back where it was, because they're getting only rid of that first layer.

Dr. Eric Gordon:
Layer, yup. Yes, the issue of that biofilm and the family of, the supportive family of molds and bacteria in the nose, and in the gut, it's just so important. So, as far as testing goes, what are your favorite ways of looking at this and how has it changed? I'd really interested in what you did in the past and what you're doing now?

Andrew Campbell:
Well, there were the first test that came out 30 years ago or so, were basically antibodies, IgA, IgE, IgM and IgG antibodies to molds. So there was a list of molds, you've got these antibodies, but then one of the things that was notable was they really didn't react to IgM. IgM antibodies really lasts maybe two weeks, three weeks, the longest 20 days. So really IgG is more important and IGA, nothing happened with IGA, just sat around, without any reactivity, but IgE reacted, because of course, mast cells and there's still a lot of allergies to molds. So having said that, I think that those were the first tests. Also, along with that came

the tests for immune, your immune system, in other words, T cell count, B cell count, but also when these B cells and T cells got stimulated, how did they react? Did they under-react, or they overreact? It was important to find out how has that person's immune system reacting. And lastly, NK cell activity, Natural Killer cell activity, you'd see a lot of patients that they're NK cells count was fine, but their activity was very low, kind of like the postal system. There's a lot of people working there, but mail is slow. So, and lastly came the mycotoxin antibodies. These came into being about 25 years ago.

And those were very useful, because your immune system reaction to pathogens, your typical four pathogens, bacteria, viruses, pathogenic fungi and parasites. You start with an IgM for two/three weeks and then it switches to IgG. You get over that, and then you have the memory stay of IgG. So that in case you get an attack in the future, your body immediately has the IgG antibodies to fight this off. In toxicology it's different, because we're exposed to thousands and thousands of toxins every day, shampoo, soap, the air we breathe, et cetera.

So in toxicology, the immune system only reacts when there's a toxin there. And it doesn't keep a memory, because otherwise it'd have to make antibodies against everything since we were exposed at birth. So what is interesting is that you can actually measure antibodies of a person, to measure the mycotoxin antibodies to a person and see how high they are, or how severe the reaction is. And then after treatment say six months down the road, you take it again. And the results show that they're gone.

Dr. Eric Gordon:
That is very exciting. I mean, that's the important news is because one of the difficulties in this field is that we're treating people with often multiple problems, multiple issues, and multiple symptoms. And it's nice to know, often we're left with treating clinically, based on

their symptoms, because our tests don't usually give us that on/off signal. And it's nice to hear that in your experience that when you you'll see these IgG antibodies to mycotoxins dissipate and reduce when people, either have reduced their exposure and you've removed them from the body. I mean, so-

Andrew Campbell:
I just, a day long, six modules for the American Academy of Environmental Medicine and the last module, number six, is all case studies in which you see how high it is. And then six months later, plus with pictures of the patient, like their scan, or whatever's affecting them. So, and I can make those available to you, but it'll have to be after the first, because that's when the course is over. Otherwise you have to pay $495 right now. I'll send it to you after May 1st.

Dr. Eric Gordon:
That would be great. 'Cause there are few tests, I'm playing with a Lyme test, the InfectoLab test that looks at T cell function and seems to be giving that same signal, which we've always lacked in Lyme disease, is because it was IgG antibodies for Lyme can last some people for years. And it's been difficult to see when to stop, or when you have to change horses.

Andrew Campbell:
Exactly, for example, the average amount of Lyme tests done per year in the United States is about 3.3 million Lyme tests. So what happens is, a patient comes to see a doctor and the doctor says, "Oh, you must have Lyme". They don't really screen the patient well enough. And so there's these millions of Lyme tests being done for a disease that's not really there. And I published an article two years ago in the summer. "Is it Lyme or is it Mycotoxins?" And it could be both!

Dr. Eric Gordon:
Often is, yes. Which is like pickup sticks, but I always tend to think the mold, the mycotoxin layer, is usually best to treat first.

Andrew Campbell:
I agree, totally agree.

Dr. Eric Gordon:
Yeah, I hate to make things absolute. because in the Lyme world, we went through that period, when you had to treat Babesia first, and it's like, instead of, wait a minute, it depends on what is symptomatic and what's moving in the patient. But when it comes to the mycotoxins, because they are toxic, getting rid of that seems to be just a, kind of almost a no-brainer, and one of the things that we're gonna talk about, well, we'll talk about now actually is the whole issue of how this plays into mast cell activation, which I think is the bomb that often makes people feel that life is hopeless, because every time they tried to get treated with something, their symptoms get worse. And so you chat a little bit about your experience with mast cell activation.

Andrew Campbell:
When you have an IgE antibody to a toxin, to a mycotoxin, that really stimulates your mast cells. Now mast cells are full of these little round bags of stuff, should we call them, some of them release heparin and histamine, but there's others that, that release cytokines like IL-6, Interleukin-6, et cetera. Well, these IgE antibodies to mycotoxins will really hit these cytokines and these cytokines will send this huge message, cytokines irregulate the immune system. So they are gonna send this message, inflammation, cause inflammation, which is one of the immune reactions that we all learned about way back in medical school. So this reaction of inflammation, when you get inflammation throughout the body, these are the patients that have a lot of complaints and you can't just, you have to be really, well,

what do I do? Do I treat this first, or that first? Or how do I do this? What's the best way for this particular patient? Now, some patients will show up with just a lot of immunoglobulin E antibodies, and some will show up with just a lot of immunoglobulin G antibodies and some will show up with both, of course, when you've got both, you know that that person is really had a whopping dose. And usually not just for a month or two, but mainly, for awhile. My worst patients were always the ones that came from Louisiana, of all the hurricanes, all the floodings, et cetera, et cetera. I mean, and they would live there all their life in those places. So were very difficult to treat and get rid of. And as you say, toxins, mycotoxins, are toxins, just like pesticides or mercury or trichloroethylene. So they're not easy to take and get rid of.

Dr. Eric Gordon:
No, yeah. So on that, what is your favorite standard, or how do you approach dealing with the mycotoxins? What's your favorite way in?

Andrew Campbell:
If these patients, part of the issue with mycotoxins is where are the patients affected? So one of the things I learned to do is do a really good neurological exam, without spending 45 minutes just on that part. So I had a tenured professor at Baylor show me for several weeks, how to do that. Every Friday afternoon, we got together in his clinic, Dr. Bernard Patten. And Dr. Patten, I got to meet through the breast implant issue.

And so he taught me little subtle things about patients, like in the case of mycotoxins, many of them will have anisocoria, which is basically one pupil smaller than the other, or larger than the other. It doesn't mean they have a blown pupil. It just means one reacts a little differently than the other. That's a little thing, but that's the optic nerve. The second thing is that he taught me to take a sheet of paper and put it on their hand like this. So if it went, like, you would really see a tremor, even if it was real fine.

Dr. Eric Gordon:
Yeah, great way for a subtle tremor to show up. Yeah, yeah.

Andrew Campbell:
And look at the reflexes, upper and lower extremity, deep tendon reflexes and touch, light touch using a little brush or something. And of course, then the needle, seeing if there's any neurological findings there, so all these little things then helped me in deciding, okay, so I'm gonna give them Itraconazole. First things first. First thing is, the first rule of toxicology, which is get the patient away from the toxin, or the toxin away from the patient.

Dr. Eric Gordon:
Yup.

Andrew Campbell:
Which is many, many times the most difficult part, because these people live in a house. They can't go out and abandon the house and buy a new one. Right, within a week or two, it's not gonna happen. Testing and remediation is not standardized in this country. So you can get five different bids using five different products and who knows if it works or not. There's only one product that OSHA accepts for workplaces and that's a product called TM-100, T as in Tom, M as in mother and 100, that's the only product OSHA accepts for cleaning up a workplace.

So it's a pretty good product to use also in the home, obviously, where a lot of us have started working these days after this COVID situation. Having said that, so then you start them on, if they don't get out of the house, there's no treatment that'll really work. 'Cause they're around a toxin day and night. The second thing, so I start them on Itraconazole, it's a good antifungal, that's a broad spectrum. Just like there's broad spectrum antibiotics, There's broad spectrum antifungals. I've used it 14,000 times almost. I've never, I've had one

problem with it, one lady in her early forties said she developed insomnia. So in the beginning I was very nervous about the liver. So I did liver function tests every two weeks, nothing happened, so I stretched out to a month, nothing happened. So I stretched it to six weeks, nothing happened. So I did it every two months and that's where I've kept it. And still no changes in liver function tests. I like to use certain, I think it's important to use magnesium in these patients. Magnesium is involved in more than 300 enzymatic changes in the body. I got to learn about it a few years ago. I got interested in it and then published on magnesium.And recently, Dr. Tom Levy's published a book on magnesium. I don't know if you know, Dr. Tom Levy, he's an he really writes great books. I like to use vitamin C in these patients, because it's a great antioxidant and these mycotoxins cause a lot of ROS, all these electrons bumping into each other and knocking things awry. So these are some of the things, I like fish oils because they're an antiinflammatory as is curcumin and resveratrol. And I think that was a lot of studies that came out of the University of Texas, San Antonio back in the in the nineties about melatonin being a neuro protector, so I like using melatonin. I always recommend the better kind and not just whatever you can find at the Walmart.

Dr. Eric Gordon:
Right.

Andrew Campbell:
So, that I think is important as well. Recently I found in patients that have problems and issues with the brain, and I found this out through Dr. Nathan Bryan of Baylor University, his nitric oxide. I did a very small study for him in a group of patients who scored, in early dementia, and make a long story short, within a month these patients had improved tremendously their circulation into the brain, as shown by MRI with contrast. So I use that in these patients as well as using what is phosphatidylserine. I like serine better than the

choline. And then I also think that using a good, well, not diet, but nutritional guideline, so that eat all you want of this, don't eat nothing of this, because people still don't know. I mean, you get a Texan in your office with a belt buckle the size of a hubcap and they tell you, what do you mean? I can't eat what I wanna eat.

Dr. Eric Gordon:
Yeah, not gonna go far, yeah.

Andrew Campbell:
So you've got to explain it, why and so that they can understand it. If a patient understands why they're more likely to follow directions. And so I explain every supplement, every medication, every item on the nutritional guidelines to the patients to where they really can finally get it and follow.

Dr. Eric Gordon:
Yeah, on your food list. What's your major no's, what are your non-negotiables, so to speak, yeah.

Andrew Campbell:
The major don'ts is obviously don't go live somewhere where there's some old mold, and that's just obvious, but the other don'ts, I tell them to stop all gluten. I tell them to stop all dairy products and I tell them to be very picky about what fish they eat. Don't eat large fish.

Dr. Eric Gordon:
Right, trying to get the mercury level come down, okay.

Andrew Campbell:
No bigger than a sardine is best.

Dr. Eric Gordon:

Oh, right.

Andrew Campbell:
Because of the mercury issue, obviously. And of course, no fast foods or soft drinks or anything like that. And don't drink anything out of plastic, drink everything out of glass.

Dr. Eric Gordon:
Yes, yeah, that's a biggie. The plastics are just amazing, how they've inundated our bodies, forget about our food supply. We are now, they are now us.

Andrew Campbell:
That's right, I also use vitamin D with these patients. I found that I started trying vitamin D in a lot of people and it was marginal or low. I like to keep it between 50 and 80, because it's good for the immune system. And these people have an immune system that's really crawling on its belly. And lastly, some patients have what is called CIDP chronic inflammatory demyelinating polyneuropathy, and as a result of the demyelination from mycotoxins. and a group of us, Jack Thrasher and I, and a couple of others, Dr. Vojdani wrote a chapter in a textbook on that.

And the best way to measure that is by doing nerve conduction velocity. It's not EMG, EMGs pick up demyelination when it's more than 20%. And it was just expensive to do, because you have to have a neurologist do it, versus doing nerve conduction velocities, are done by a technician. It takes just a few minutes and you get the results right away and it detects demyelination, at 5% or more. And I did a brainstem auditory evoked potentials, visual evoked potentials. They pick up a lot of information from the brain. And if they do have antibodies to myelin, I'll remind people that myelin in the brain is made by oligodendrocytes. And in the peripheral nervous system, it's made by Schwann cells. So

you've got demyelination through oligodendrocytes that qualifies you for IVIG. So I give 0.4 grams per kilo per dose, once a week for six weeks and check them again. And some patients have to take that more than once, again, you measure their progress with the nerve conduction velocities.

Dr. Eric Gordon:
Right, yeah. Have you started doing any of the small fiber biopsies or it can just sometimes pick up some of the small fiber neuropathies?

Andrew Campbell:
Well, even the small fiber neuropathy suffer from the demyelination and that's one of the toughest parts to take care of with patients, especially if they don't have insurance or something of that nature.

Dr. Eric Gordon:
Yeah, no, no. I mean, if they don't have insurance, it's very difficult. Yes, since IVIG is in the prohibitively expensive range for most, yeah. Just the other things and those, I love your list. I mean, nitric oxide, I think is, yeah, it is a huge for people. I use a lot of phosphatidylserine in people at night, but I've always been very big on the phosphatidylcholine, especially the IV phosphatidylcholine for detoxing along the way. Is that something you've played with, or you haven't seen...

Andrew Campbell:
Well, I've tried it both ways.

Dr. Eric Gordon:
- Right.

Andrew Campbell:
- My experience has been more positive for the serine.

Dr. Eric Gordon:
Okay, yeah, no, I think, basically, yeah, the issue, these chemicals are, they wind up later on in ceramides and in sphingomyelin and things that we are, I mean, chemicals that I never really paid attention to, and just in the last few years, discovering that these seem to be the markers for chronic inflammation, these up either elevated or low, there's a lot happening in the body at levels that we still have very little idea about. I think that's the hardest thing for patients to understand is-

Andrew Campbell:
Inflammation, inflammation.

Dr. Eric Gordon:
Yeah, inflammation, but inflammation is modulated at lots of different levels. And that's where, we're still in the early learning curve of how this organism works. And it's the way people are presented medical information, it sounds like we understand the system. And I try to tell people if we build it, we understand it, but nature, God, whatever your word wanna be, but we didn't make us or trees. And we do not understand how these things work yet. A lot of this is, I call it Pin the Tail on the Donkey.

We have an idea, we see if it works and the people who think they have the theory, they just have a story, as we can see from COVID at the moment, but let's not go there. Going back to mycotoxins, mold, allergy versus toxic. 'Cause I think that one of the things that I have been taught and I want your opinion on it, is that molds are not great at producing a lot of IgE, in a lot of people, a lot more people seem to have IgG reactivity to molds. At least that's

been the experience, my experience, and some of the other people that I know, but I'm curious, you've been doing this a long time. So what's your feeling on that?

Andrew Campbell:
I think, well, again, with the ELISA method of antibody testing, I've seen, as you say, a lot of IgE, especially on, and just today, I got this paper from a doctor in New Jersey, two doctors, a doctor in New Jersey, and one at Tufts University about Increased Sensitization to Mold Allergens Measured by Intradermal Skin Testing Following Hurricanes. Well, I think with what we've seen the climate change, more hurricanes, more flooding, more tropical rains, and these other climate change issues, they affect not only homes, but they affect public buildings, libraries, schools, businesses, et cetera. And so people are getting more and more exposed to it. Of course the immune system is gonna react to IgE right away, because it doesn't take that long for the body to produce an IgE reaction. And of course with that comes inflammation.

Dr. Eric Gordon:
Right, yeah. We're seeing a lot of that. One of the things we, I mean, years ago, when I used to do a little skin testing, I didn't do that for a while, we would see that mold allergens, when we skin test them, they often didn't react the way, like most allergens react within minutes when skin testing, but the mold would really show up sometimes day two and day three, if you bother to follow about that long, which allergists generally don't. And that's why I was thinking that, and it also, oh, there's a wonderful doctor who passed away about 10 years ago, in San Francisco, whose name I'm blocking on right now.

But he was an immunologist, allergist immunologist, who really got and was treating people with nasal ketoconazole back 20 years ago, because he was seeing elevated IgG antibodies in the serum, across multiple molds, and that's what always had me kind of hooked on the IgG. 'Cause I, even to this day, I'll often do, insurance companies are happy to

pay for IgE panels. They don't like to pay for IgG panels, for molds, for anything allergy. But again, I also, I see a lot of this where the IgG is positive in the molds and the IgEs are

negative. It's just one of those things that I found curious about the various ways the immune system responds. And I'm wondering if perhaps seeing more IgE has to do with, again I think it's just, people are getting more, their immune systems are getting more hair trigger. I mean, the autoimmune diseases have skyrocketed over the last 40 years. And I think that's what, this is just another issue that when the toxic load gets high enough, the immune system really starts having trouble in modulating itself.

Andrew Campbell:
That's right.

Dr. Eric Gordon:
So tell me some of your, you've had some very interesting, I think, clear cut patient examples of people who've had diagnoses of autism, or even all the way from in the young, and then Alzheimer's at the old age group. And what's been your experience in treating these folks?

Andrew Campbell:
The experiences that for a long time we didn't know what to do with autism and pediatric neurologists would give all these drugs, prescription medications that we didn't have a study on. Okay, if a child age five takes this medication, how will that affect their brain when they're 25, or 35, or 45? And I wasn't very much in favor of giving anyone, with a developing brain a drug, it affects the brain. So, I got all of a sudden in my office, this pediatric orthopedist comes with his son and his wife. And he had opened an office in a big city, started practicing in the building next to the hospital. And it had one of these attachments, where you walked right into the hospital and he was there when their son

was born. I used to have him in a, on Saturdays, they'd go back to the office because he anted to catch up on charts and she ran the office, so she did the insurance stuff and they

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put the son up in a crib right next to a certain wall where they both could see him if he needed anything. And then when, as he grew, they put them in one of those, I call them cages, but playpens, and he started having problems, so naturally, he goes up into the office, some other office in the building and says the pediatrician, neurologist and they all agree.

This kid has autism. So then they're there on another Saturday and someone knocks at the door and he opens up and here's these two men in full Tyvek suits with respirator, double gloves taped and say to him, "We're here to inspect for mold". And he looks at them and he says, "Well, there's no mold in here". He says, "You don't understand three floors above you, up against this wall is a sink and that behind the wall, the sink has been leaking down and that's the wall they put their son next to. So he read up on it to read some of my publications and that's why they flew in to see me.I test the kid, but before I get test results, I said, "Look, you're a doctor. So if you want, let's start treatment.

Even though we don't have an answer, if you're willing to do this and if you're willing to take my cell number and give me your cell number, so in case something happens, I don't care, what time of the day or night, you call." He says, "I'm ready to do whatever it takes". So I put the child on what I thought would be best for him. I do remember a part of it was Itraconazole liquid and the mother calls me three weeks later sobbing, because her son spoke to her, looked at her and asked her for certain food that he liked.

Dr. Eric Gordon:
Wow.

Andrew Campbell:
Six months later, dad and the son were playing with these balsa wood airplanes out in the yard, a year and a half later, he was in school.

Dr. Eric Gordon:
Wow.

Andrew Campbell:
So that led me to think there's something here.

Dr. Eric Gordon:
Yup!

Andrew Campbell:
So on the other end of the scale, I get this gentleman. Well, the wife brings the gentleman in, the husband, very wealthy people. They've been to see five neurologists. They flew to see two of them, neurologist. "Yes, you have Alzheimer's". He couldn't find his, he didn't know where his clothes were. He didn't know which bedroom was his bedroom. He didn't go out anywhere because he'd get lost immediately. He kind of stayed quiet in the corner when family came over, 'cause he didn't know who the heck they were. The one thing they noted was, they had this piece of furniture in the bedroom, up against the wall that held a TV screen and had drawers and nooks for books, et cetera.

And they decided to get rid of it and put a new one on, because they got a better TV. They removed that and behind that the wall was full of mold. So they moved out of that house, I start treating him, to make a long story short. Now he's happy-go-lucky guy. He drives his car where he wants. He recognizes all his friends, et cetera. And I don't know that Dr. Dale Bredesen published an article about, I think it's five years ago, four or five years ago about

the one type, the inflammatory type, you brought inflammation in, that's very essential. Inflammatory type can be caused by mycotoxins. And another study doing brain autopsies

on patients with Alzheimer 28% had mycotoxins in their brain, pathology. So I'm not saying everybody's gonna get better, but it's certainly worth a try.

Dr. Eric Gordon:
Yes, this brings us almost full circle back to that idea of biochemical individuality that people are so different. And just because you have a diagnosis, doesn't tell us how you got there and it doesn't tell you how to get better. It gives us a place to start, but it's not a, the medicine that we were taught, always suggested that if we had the diagnosis, we had somehow the answer. I don't know why, but that's our training. And we've trained the population to, "Give me a diagnosis".

And unfortunately, it just gives us a place to start, that that's where it is. And then we have to work. And it's so interesting that now with the mycotoxin antibody testing, perhaps we can better stratify our patients, because I do a lot of the urine mycotoxin testing over the years. I mean, I'd go from the beginning of it, we did it. I've always had a bit of a jaundiced eye about it, because I could see that it didn't correlate with symptoms. Okay, now, over the years, I have done enough work with the labs and see that.

I don't think it's, the high levels are not background from foods, but still they're not always correlated with symptomatology. And that's the difficulty is that when you're, and the good news is that a lot of people just use a lot of binders and binders are fine. In fact, I'd like to ask you, is there any binders that you particularly like? But I haven't finished my point, is that the thing about binders is they're also non-specific, because lots of things produce toxins and getting a response to a binder, doesn't mean that you have mold.

Andrew Campbell:
Correct.

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Dr. Eric Gordon:
Maybe, but anyway, but so let me hear what your thoughts are on binders.

Andrew Campbell:
Well, when I use charcoal, activated charcoal is a binder, mainly when I have a patient under treatment and they develop, I don't know, bronchitis and they're given an antibiotic and I don't know cough syrup or cough suppressant or whatever they're given and then the infections over. I wanna get rid of those medications and chemicals out of their body. So I use activated charcoal for 10 days, two weeks, to get that out. In general, I'm pretty much a evidence-based doctor and there are no studies in humans, on binders doing anything for mycotoxins. There's a lot of studies on turkey poults, and piglets and fryer chickens, and so forth, but there's none for humans. So how do you know what the dose is? How do you know which one to pick, et cetera, if there's no guidelines in the peer-reviewed medical literature?

Dr. Eric Gordon:
Well, oh, that's for sure, but I guess, how do you say, evidence is nice, but if I just waited for evidence in the literature, I don't think I would have a lot to do for a lot of my patients. We have to look at just risk benefit, you know? Yeah, I need a high level of evidence, if I'm going to use a medication which has a significant list of, it can make you worse. I have a low threshold if I'm using nutrients or things that have a low likelihood of harm, because, this is we're treating orphan diseases. I mean that, you know we're treating things that because they affect different people differently, it's very hard to get a decent cohort. And I mean, I've been involved in the chronic fatigue world for the last 30 years, but in looking at studies and

trying to help people do studies and I can tell you that the biggest problem is been that the patient selection is terrible. Okay, yeah. So that's my little diatribe about evidence-based

medicine is that at this point in time, I don't think it's great. And my other issue is that many times today we have what I call evidence-bought medicine because to do decent size studies just is expensive. Even small studies are expensive, simple things they're not cheap, because people don't fill out paper easily, usually, or don't come back for follow-up easily. So you have to hire someone who has to go after them. Anyway, but so we have used lots of binders. The great question I have is which ones to use when. Again, you're right, people are made lists based on animal studies.

Andrew Campbell:
Well, there's a lot of sites that talk about this binder for that mycotoxin, that mycotoxin, but it's basically that person's opinion on what they've done. The other part of this is I get about 200 to 250 emails a month from people who say I've been on this and this protocol, with these and these binders for three years. And I still feel terrible. What should I do? I don't have anything against binders, if they work, because sooner or later you have patients who do well, I hear from the ones that don't, but I know that there are other patients that have told me, no, it helped. So it's just, what's a good way to know which way to go a little-

Dr. Eric Gordon:
I agree, I mean, one of the problems I have in this whole field is why I don't care if you're treating Lyme or treating mycotoxins, is not knowing when to change things, and I understand, 'cause I have seen people be on intravenous antibiotics for a year and then suddenly get better, but I've seen many more people be on intravenous antibiotics for a year and not get better. My point is usually, a few months you get a flavor, if you're going in the right direction might take a long time to get all better, but you should see progress with what you're doing. And what happens is that the true believers, keep pushing the same message even if the patient's not responding and it's because occasionally they do.

But we have to remember, occasionally isn't enough to put the other 98 people on the same protocol. Anyway, that's my soap box.

Andrew Campbell:
Dr. Gordon, I did not realize that you were a medical philosopher.

Dr. Eric Gordon:
Oh God. Well, I think if you're been working, I mean, I started doing this and being interested in this in the seventies, but really got into it in the eighties and went full time into it. And you have to become philosophical, because I remember in the eighties we thought things were gonna change. They have a little bit, I mean there's no question about it. You have people like Bredesen, who's published, and people are talking about him in a big way, but you still have most neurologists think that what he said was bogus, so we haven't come that far. It's a hard road, but I'm hopeful anyways, but I wanna thank you. This has been really fun and I hope informative to our patients and our listeners and I wanna thank you for the work that you've done and just the focus, I mean like there's nothing like a doctor who really pays attention over time to his clinical outcomes. And I can tell from the work that you do, that that's what you've done and help light the way for the rest of us. So thank you very much.

Andrew Campbell:
Thank you. Thank you very much for having me.

Dr. Eric Gordon:
Oh, and by the way, I just should note one thing that I think is important is that though you are a, I think you're the scientific advisor from MyMycoLabs that you are uncompensated, I mean, you're doing this because you believe in it. I just wanna...

Andrew Campbell:
Yeah, I'm not compensated. I wanna help people. I think that's what most doctors would .

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