Why psychiatric symptoms are not always psychological: the impact of biotoxins and inflammation on mental health

with Dr Mary Ackerley

The MindHealth360 Show

Episode Transcript
Host: Kirkland Newman
Guest: Dr Mary Ackerley

Dr. Mary Ackerley:

And it was pretty clear to me, after a while in psychiatry, you can follow the Cookbook and it's actually boring, to me. It's like you do it and you do it, and some people get better and a lot don't, and you go to the next level, and you can be happy with that, or you can just start trying to wonder, really, a lot of people don't get better and they are just so sad and so unhappy. Are there better ways? And the research is really clear, antidepressants don't work any better than actually placebo in many cases, where they're pretty equal to placebo. And many studies showing things like diet, exercise, supplement interventions, work as well.

Kirkland Newman:

Welcome to the MindHealth360 Show. I'm Kirkland Newman. And if you, your loved ones or clients suffer from mental health issues such as depression, anxiety, insomnia, poor memory, poor attention, mood swings, exhaustion, et cetera, I interview the leading integrative mental health practitioners from around the world to help you understand the root causes of these symptoms, many of which may surprise you and suggest solutions to help you heal. If you like this interview, please do subscribe and forward to others who might find it helpful. If you want further information, please go to www.mindhealth360.com or find us on social media.

Kirkland Newman:

Dr. Mary Ackerley, thank you so much for being here on the MindHealth360 Show. You're a classically trained board certified psychiatrist. You're a summa cum laude graduate of Harvard University. You studied at the National Institute of Mental Health. You finished your residency at Johns Hopkins and you were certified in psychiatry and neurology. You also hold active medical licenses in Arizona and Florida. You're a co-founder and past president of ISEAI, which is the International Society for Environmentally Acquired Illness. And it's a professional society dedicated to the teaching and researching of environmentally acquired illness.

Kirkland Newman:

You've worked with biotoxin illness since 2010. And you were the second certified practitioner in the Shoemaker protocol in 2013. You're also board certified in integrative and holistic medicine and a member of the Arizona Homeopathic and Integrative Medical Association. Your internet article entitled Brain on Fire is a summary of the psychiatric implications of biotoxin illness. Now, there's a lot more, but I'll put that in the show notes. But you're an incredibly accomplished, very impressive psychiatrist and practitioner and you have a lot to say.

Kirkland Newman:

So I think what I'd like to do is start to ask you what pushed you into integrative and functional medicine psychiatry? You being a traditional psychiatrist, what was your journey to that side of things?

Dr. Mary Ackerley:

I get asked that a lot and I think my insight changes all the time. We don't really know how we end up where we're going to end up. When you look back and I'm sitting to read this, sometimes I don't even recognise everything. So it's been so long ago and there's always just been an evolvement. So psychiatry I was drawn to just, I think, from my own early childhood traumas with the death of my father. And that really sets you up for being a lot more sensitive to the fact that life isn't always peaceful and wonderful.

And certainly taught me a lot about sympathetic overdrive without knowing the words. And just also intellectually, the brain fascinates me. So there are those two things. It's like there was nothing else. Neurology would have been great, except at the time I was doing neurology, we used to have some catchy saying, but basically the diagnosis is wonderful, but then they all die. There were no treatments for neurodegeneration.

Dr. Mary Ackerley:

And even now we have more treatments, but psychiatry always seemed more promising in terms of getting people better. And I think that since then, it's just been my own journey through patients as well as my own personal preferences. I just seem to have some stronger preferences to want to do things in a more organic way that's always included diet, and it's always included some exercise and it's always understood you don't live in isolation where you just have one neuro-transmitter wrong and we fix that, everything else will just shape up.

Dr. Mary Ackerley:

It was pretty clear to me, after a while in psychiatry, you can follow the Cookbook and it's actually boring to me. It's like you do it and you do it, and some people get better and a lot don't, and you go to the next level, and you can be happy with that or you can just start trying to wonder, really, a lot of people don't get better and they are just so sad and so unhappy. Are there better ways? And the research is really clear, antidepressants don't work any better than placebo in many cases, where they're pretty equal to placebo. And many studies showing things like diet, exercise, supplement interventions, work as well as many of the antidepressants we have. And that's been around for the last 10 years really strongly. And most drug manufacturers have even stopped making traditional antidepressants, because the old stuff, Prozac, still really works if an antidepressant is going to work. So I think all of those things. And then my own quest for just health and happiness is health and happiness is not going to be found in Prozac. It has been around since '87. Works. I remember taking it towards the end of my residency and going, "Wow, miracle," but it's not a miracle. Life is still, you still have to make decisions, you still have to go on. I think much later in life I realised I was living in a 100 year old home. We were renovating for years, there was mould in the base. It was just like, do you think that had anything to do with just not feeling too energetic and happy about things?

Dr. Mary Ackerley:

So we keep learning layers and layers and why things didn't work. So in some sense, for us and the whole thing it's been, I have a predilection towards psychiatry and understanding human suffering that I'm no stranger to. And that I'm a very honest person. When things don't work, I tend to say that it doesn't work instead of trying to say, "Well, it doesn't work, because that person didn't do it correctly. And you didn't follow that protocol." And I've heard all of these excuses most of my life for things that don't work as the other person's at fault.

Kirkland Newman:

Interesting.

Dr. Mary Ackerley:

So that's where I am. I'm always looking for what's the less next thing nobody seems to understand that's actually really important.

Kirkland Newman:

Absolutely. And your article, the Brain on Fire, which is absolutely fantastic, which is all about neuroinflammation. And you talk a lot about biotoxin illness, obviously, but you also talk about infections and other things, other mediations of inflammation. So can you first tell us maybe a little bit about biotoxin illness? What is that? And how does that impact our mental health?

Dr. Mary Ackerley:

So I realised I live probably in a state where we're sixth in the country in Arizona in mould, which seems really surprising. But mould is extremely common. And it's a lot more commonly known and understood in the US and in the rest of the world, I think much more in England, than 10 years ago. So biotoxin illness is a more fancy word for mould illness, people living in environmental inflammation. And it turns out there's a lot more that grows in a water damaged tone than moulds. There are all sorts of fungi and gram-positive and negative bacteria like Actinomyces, there's Mycoplasma grows and people always forget this. Mycoplasma grows in water damaged buildings.

Dr. Mary Ackerley:

So there's a lot of stuff that grows, and there's a reason we have houses and don't live in the wilderness. We're protecting ourselves from the elements. And these kinds of pathogens cause inflammation. And that's really well documented that they cause inflammation in the body. It's what we now know with COVID is cytokine illness. A lot more people understand the role of cytokines, the inflammatory substances produced by the immune system. But biotoxin illness does something very similar and it affects, of course, the brain.

Kirkland Newman:

And this is what interests me, because you say in your article, there's a huge amount of research that backs this up, that backs the fact that in the psychiatric literature, that neuroinflammation causes depression, anxiety, psychosis, suicidality in your degeneration, et cetera, and yet it's not in clinical practice, Or not commonly in clinical practice. Why is that?

Dr. Mary Ackerley:

One thing is just it's too complicated for a lot of doctors and patients to really want to address, that's part of it. I'm a person who does look for silver linings. So in some senses, COVID is making it harder and harder for people to stop pretending that A, that we don't understand why people have brain illness, and B, that there are simple solutions. So the long hauler is becoming much more recognised. I haven't seen anything in long hauler symptoms that I haven't been seeing in my chronic fatigue patients from biotoxin in line for the last 10 years. And the brain is always mentioned. Every article people get COVID, it seems to be a minor case and their brain is affected. And it does enter the autonomic nervous system, but most doctors are saying or people really studying, it seems to be the inflammation that's been caused that causes the surround, what surrounds the brain or blood brain barrier to become inflamed. And that's causing the brain fog. That red word that's always, but that's not scientific. We can describe it in longer what it is, but most people once they've had it, know exactly what you're talking about with brain fog, slowed processing, slowed mental awareness, word finding focus, attention difficulties, the fatigue, certainly depression and anxiety. So it's a long way of saying it is becoming more recognised. Every time I talk about this or do a talk for some conference, I'll go and look at the latest literature for the last year,

doubles every year. New cytokines are found, new research is done, new meta analysis. I've never seen one that says there's no link between inflammation and the brain. It's clear.

Dr. Mary Ackerley:

Now the latest stuff that's come out is we have the astonishing research that inflammation is linked to neurodegeneration. And it's very exciting, because this inflammatory substance, what things that basically would be fixed by fatty acids and diet, it's an inflammatory substance given up by the macrophages. And they found in mice that when they reversed it, they definitely have a drug that's stronger than say evening primrose oil, which is what a lot of people have used, it's prostaglandins. And the mice all regained their awareness and focus. And it's exciting news. Well, it's exciting and it is exciting to me too, because it seems stronger.

Dr. Mary Ackerley:

There's a point as inflammation just keeps going on, chronically in people, and as they age and their body doesn't put out hormones, the immune system, the thymus, which protects us with T-cells, it's like senescent after the age of 60, a very frightening fact when you actually read that and it's like, yeah, and that's where those people are going. The immune system and the hormones are all decreasing in efficiency as you age that we're going to see more and more cognitive decline and less ability to fight inflammation. So again, I've taken a long road here too, but the research is there. And I think you're not going to really even find most scientists at this point wanting to argue this point. It's the practical implication in people's lives. Psychiatrists are trained to in 30 minutes get the symptoms, give a drug. And it is a faster approach. And they learn to not be totally honest in their minds about the fact that the research just really isn't that great for the long term outcome of what they're doing.

Kirkland Newman:

Interesting.

Dr. Mary Ackerley:

Neurologists are in the same boat. And we're all looking at this tsunami basically, of we know Alzheimer's and neurodegeneration, and now long term sequelae of COVID.

Kirkland Newman:

Absolutely. So neuroinflammation essentially could explain any psychiatric symptoms. So depression, anxiety, suicidality, neurodegeneration, psychosis. Any of it could be mediated by inflammation.

Dr. Mary Ackerley:

It's the kindling. It is the fire. And then it hits specific areas. The fire affects specific areas in the brain, specific parts of the immune system. So there are different pathways in different ways, but yes. And even if you go to any of our long term chronic diseases, people just say it's inflammation, it's the small slowly smouldering fire of what was effective that keeps going that keeps the body turned in a way it's attacking things that aren't really there and destroying brain tissue, other cardiac tissue, lung tissue in the body.

Kirkland Newman:

Exactly. If we look at cause and effect, what are the things that can cause neuroinflammation? And there are several different pathways, I guess. There's the auto immune system and there's the microglia,

there's the cytokine system, there's reaction to various different infections, reaction to biotoxins. So what are the main causes you would say, and the mechanisms for this neuroinflammation?

Dr. Mary Ackerley:

Well, you've just named a whole bunch, because under every one of those headings, we could have six subheadings and discuss all of those. Someone asked me once recently, “So what are the main things you use for the brain?” and hoping I'd give them a list of three things, a little protocol that if they did this, they would fix someone's brain. I just started laughing and I started thinking, "Well, how do I think about this to explain to people?" Once we've assessed there's a brain issue, a neuropsychiatric issue, whether it's going to be neurological cognitive issues, like brain fogs, more severe cognitive issues, more like dementia, tremors or neurological psychiatric anxiety, depression, OCD, and trying to get the specifics.

Dr. Mary Ackerley:

The first thing I'm going to go for quick fixes, which is diet. Very few people I meet in this condition that I can't find some very common well known causes of inflammation, too much sugar. I've had doctors ask me, "Do fruits count as carbs?" Yeah. Yeah, once it hits your saliva, it's all the same. So our medical education is not terrific. When people say I eat healthy, I smile and say, "That's great, you'd rather eat healthy than not healthy. Can you tell me what you mean?" Because everyone's idea of healthy is not the anti-inflammatory diet. So I'm always looking to get people basically on a low carb, autoimmune paleo diet, which means quickly getting the carbs below 50 grams, getting people off gluten and dairy, and then just dropping junk food.

Dr. Mary Ackerley:

And that actually makes a difference. And you say, "Well, that's not much." Well, it's actually for some people still an enormous jump because you have to go over the healthy things they're eating that are causing major problems. So diet is without a doubt, it's the food, it's the medicine we eat every day. It starts to sound really boring, but when you're battling inflammation, it's the first thing you do. Yes, we all know about COVID indulgences and stuff like that, but after a while you realise that excuse is running out and that you're going to have to learn to at least eat keto brownies. Okay. And still drop the gluten. Inflammation's inflammation and food and poor choices in food and not eating organic, just cumulatively keep increasing and can quickly make changes. That's what I tell people is really it's worth doing it, it's not just to lose weight, it's to feel better in your brain.

Dr. Mary Ackerley:

So working on a diet that I would call basically a paleo autoimmune and low carb and taking off obvious offenders. And then the next thing would just be fish oil. I love fish oil. It really works. And in the beginning, there's probably nothing better, because most people are very deficient in the anti-inflammatory oils. So part of the diet is getting them off all the vegetable oils, all the people who are not eating oils, because they think it's causing a heart attack, because that is so ingrained in people still, no matter how much it's been said, fats are really important for the brain. The stronger message that people have heard, you will die if you eat fats from cardiac, that message is stronger. So I still get a lot of people who are terrified.

Dr. Mary Ackerley:

Olive oil is a wonderful solution for most people, people who say, "Well, I have phenols." And we're getting into now very specific things. Most people need a combination of four grams of fish oil, a good quality fish oil and olive oil, a tablespoon three times a day. And I have people drinking it for its anti-infective is going to fit pretty quickly. I've had bipolars tell me one or the other. Guzzling fish oil out of the refrigerator, I've had a few do that. And more recently, a couple of people said, "My God! You put me on the olive oil and I started guzzling that too. And I've just been doing, like you said, a tablespoon three times a day and putting it on everything. And I'm doing keto and my moods, I've never had them so steady."

Kirkland Newman:

Wow.

Dr. Mary Ackerley:

So again, where you're starting, it's going back to the basics before we get really fancy about lion's mane and the peptides and stuff is just the flute and the oils. And then we can go into phosphatidyl codings and stuff, but you can get really far with fish oil and diet and people get so bored. It's really important. And then trying to work with gut inflammation a lot, which is going to go down with changing diet and using better oils and then maybe a good probiotic, a good antihistaminergic, because histamine is a very potent cause of problems in the brain. Like lactobacillus rhamnosus, which helps the bagel here. I like that. I like spore probiotics. I like probiotics that have never caused anyone an issue, because I get tired of people taking probiotics and they're worse if these tend to be very safe.

Dr. Mary Ackerley:

So working with the gut, working with the oils, working with food, takes people a long way. And I'll get people who think they're going to get around all of this, because they take 15 supplements recommended by Bredesen. I'm taking all of this and the neuroprotective and I'm taking this and the lion's mane and the phosphatidyl and the Ginkgo, and I still don't feel great. And it's like, "Yeah, you can blow up an A1c 6.5," meaning tons of sugar in the body. So if I give a great message, if you really want to stop inflammation, you are always just going to have to be on a good diet, cheating in your mind where you forgive yourself, doesn't work. Lots of people have been there before you. And exercise. And by exercise, I don't really mean high intensity aerobics, that's helpful for a lot of people, exercise that's mindful and conscious and allows what we call a structural integration of the body, starts to release trauma, starts to improve the vagal system.

Dr. Mary Ackerley:

And when you can improve your autonomic nervous system, which is connected right around here to your brain, you're going to get a lot more health going in the gut, in the lungs, in the heart and in the brain. So I tend to really favor for exercise, these days Qi-Gong, because so many of my patients have some dysautonomia, some real problems with integration, with eyes and audio and hearing. And that mindfulness of breathing and movement, I've never had anyone been able to say, "I just can't do it. there's no way you can't". Well, I don't care. And it's meaningful.

Kirkland Newman:

Completely.

Dr. Mary Ackerley:

So there are lots of things I can talk about there, but these are all ways to approach with food, diet and exercise, a really healthier lifestyle that keeps this kindling from always being there. And then the minute there is a trauma, a pathogen mould spores, a traumatic event, your body doesn't fall apart into depression.

Kirkland Newman:

I think it's really important, because essentially what you're talking about is the terrain. So the terrain, your body has to be resilient and you have to really make sure that it's resilient enough so that when the proverbial S-H-I-T does hit the fan, which it will at some point, whether it's biotoxins or infections or traumas, you say that you're more resilient to the inflammatory process that will happen. And I'm interested, because you keep talking about the vagus nerve and I find that fascinating. How does the vagus nerve mediate inflammation? What is its role in inflammation? I know it connects the gut and the brain and the heart, it's a big connector. But what is its specific role in inflammation? Do we know that?

Dr. Mary Ackerley:

I think there are a number of studies. And I think the simplest way to understand it is it's the longest nerve in the body. So it does run from around here, which is really important. I keep pointing here, because the amount of problems people have at the intersection of their skull and the beginning of their cervical spine is enormous, at least, with what I'm seeing. And it is related to anxiety and depression too. So you have the vagal nerve running on both sides. And the longest nerve in it is traveling through heart and lungs and gut and diaphragm, going all the way through the gut. And so it is your parasympathetic nervous system. It is the relaxer. It is, when it's overdone, the break. And there can be problems since a lot of the people I see with chronic fatigue. But the healthy response is you have a very balanced parasympathetic release of neurotransmitters and hormones in the body. It's where we rest and digest. And honestly, if you are sleeping through the night and digesting, even if you're not eating always the right things, you're going to be so far ahead of most people who never give themselves the time to digest, whose sleep is poor, who keep getting more anxious, more bent over and tight and get into this very poor circle. So all of that, when it dysfunctions leads to more inflammation.

Kirkland Newman:

Yeah. And it's very interesting. I was interviewing a doctor of osteopathy, in fact, who was talking about how all these nerves around here, around the neck, the back of the neck and the tongue are very important for the vagal system. And how people get really blocked in these areas, and these blockages create these breaks in our energy flow, our circulation, our lymph flow, et cetera. And these are not things that we think about in terms of mental health, but probably we should.

Kirkland Newman:

And then coming back to the causes of inflammation, I know you're a specialist in mould, but also infections, things that we don't necessarily think about. Not many people, for instance, know that a poorly treated streptococcal infection, which can lead to pandas, which is pediatric autoimmune condition, which can lead to psychiatric symptoms, or Lyme disease, toxoplasmosis. So all of these things that we wouldn't necessarily, and as you said, COVID associate with psychiatric symptoms. Can you talk us through a little bit? Essentially if somebody has these psychiatric symptoms, should we be looking,

based on, I guess, their circumstances and their symptoms, should we be looking for infectious causes, viruses, bacteria and biotoxins?

Dr. Mary Ackerley:

Absolutely. And I would say first going for the mould has just been my experience. And part of my journey has been, as I was doing integrative psychiatry, maybe more than 10, 15 years ago, there was another doctor nearby in Tucson, in Arizona who was pretty well known for treating mould. And I would deem his patients, because I didn't know at that time mould really affects the brain through inhalational toxicity. And he would be treating them, but had a hard time addressing how anxious they were, how hormonally out of balance. And they ended up seeing me. And at some point I began to stop thinking they were psychosomatic, which realistically has been my training and every other psychiatrist training is you think you're breathing stuff behind the walls, which is making you crazy and have nightmares. Fine. Let's do this. Would you like some Prozac? And we'll work on this. You think it's psychosomatic, but you're nice. But at some point, I began to realise that they have a lot of labs here that are abnormal, which are things that were cytokines that are really well studied now in mould. And these could affect them. And I became curious too. And that's really how my journey has been. So just turns out mould is very common. It really is hidden behind the walls. It's in the basement. The older the home, the more chance for water damage and it's insanely toxic to the brain.

Kirkland Newman:

And what's the mechanism? Because this is what makes me quite curious. As you know, it's so counter intuitive that these mycotoxins... Is it because they activate the immune system? So the body reacts to these viruses or bacteria or mycotoxins and they mount an inflammatory response? Is that the mechanism?

Dr. Mary Ackerley:

There are several. So there isn't one, but basically you inhale. And I think we all know from COVID now, people are really catching up to where I've been for 10 years and a lot of others. You inhale, the nose is incredibly important, and we don't take very good care of it in Western society. So things pile up and they go towards your brain. And now we know the loss of taste and smell is a sign of COVID and that's the mechanism. So mycotoxins do the same thing and are going in a direct route of entry and they do kill. Some of them just will absolutely kill the brain cells, which we might consider the worst.

Dr. Mary Ackerley:

But mostly what happens, its like COVID, is inflammation is set up, the body starts attacking and can't effectively kill them, in part because when we get to mycotoxins, they're a toxin, they're already dead, but the body is trying to kill them and making a lot of inflammation that is causing the problems in the brain and in the nervous system, in the lungs, tremendously in the gut. So that's probably the major, but it sets up all sorts of reactive oxidative species, so people are in a very unbalanced oxidative state, and again, that's going to affect the brain. They just plain hurt all over, their brains don't work. And they tend to feel anxious. They're not sleeping, because the brain and the joints and the inflammation is way out of whack, and the gut.

Dr. Mary Ackerley:

So there are probably some other mechanisms we haven't understood, because most of this has been studied in labs like Wuhan, basically, trichothecenes, which are made by Stachybotrys, are a biowarfare weapons in the State of Arizona, at least in other states. So they are dangerous. We know they're dangerous. We know we can kill people and make them bleed and do bad things. But when it's going in your bathroom, everyone says you're psychosomatic and this is not a problem.

Kirkland Newman:

So there's the inflammatory cytokines and then there's vasculitis, which is inflammation of the blood vessels as well, and then the microglial activation. So there are different mechanisms, I guess, through which this neuroinflammation can act. And you also talk about brain injury. So if you get a brain injury that can lead to persistent activation of the microglial, the immune system and the brain, and that has a potential direct correlation with neurodegeneration, like Alzheimers.

Dr. Mary Ackerley:

Usually, it's neuroinflammation first and then we're going to have neurodegeneration. But I think we'd all like to make these neat piles, like mould versus Lyme versus strep is the majority of people as we get better testing, have all of it. And they've had TBIs, because we're humans who hit our heads and no one told us to really take better care of them. Mould is growing everywhere and that's the argument used while it's growing everywhere. It's yeah, well look at civilization. What do you think? Do you think we're a really healthy, wonderful race? But there are lots of normal moulds, but very toxic mould. But in the last 20, 30 years, wherever you want to look is pathogens carried by ticks and mosquitoes have multiplied, because of all the various things going on in an environment. And destroying people's guts at such an early age that they get a strep infection, instead of it being kept here, it just starts wandering into the gut or into the brain.

Dr. Mary Ackerley:

So the kids I see with PANS, sometimes it might be a pure mould, might be a pure strep, maybe it's just a pure bartonella, which is what causes the vasculitis more than just say mould alone. Bartonella just seems to really love the endothelium of the small vessels. It's a combination of all of it in a body that hasn't been eating well, has had too many antibiotics already. Doesn't have a lot of defence and it's hitting everything you talked about. So there isn't a neat box in most of the people by the time I get to see it.

Kirkland Newman:

Yeah. And I think that's the challenge also with integrative mental health and functional medicine psychiatry is it is such a huge piece of detective work that has to happen to unpick all the different potential root causes and then how to treat them. And it's quite a complex puzzle. And when you look at it, it's so much more complex than giving someone an SSRI--

Dr. Mary Ackerley:

Right. And I totally understand there are days "could I just flip some benzos and SSRIs and stop the whole other thing?" Yet it's not honest. And that to me is what distinguishes people who can believe in things that don't really work, but we'll still do it in people who are like, "No, this just is not the best path." If it works for you, you're going to be back in five years, if that's all you do.

Kirkland Newman:

Well, I think that's the problem. It's about sustainable solutions. So it's basically-

Dr. Mary Ackerley:

Yes.

Kirkland Newman:

...you've got to get sustainably better, essentially. And if we look at the consequences of neuroinflammation, I know I keep coming back to that, but the actual mechanism, which fascinates me, so in your article, you mentioned that neuroinflammation can lead to decreased serotonin production, which I find very interesting and also decrease dopamine production. So inflammation can actually decrease the production of key neurotransmitters for the brain.

Dr. Mary Ackerley:

Or increase the transmission. That is a well studied one pathway of kynurenine pathway, and basically serotonin tryptophan going down instead of going to melatonin or going down an inflammatory pathway that is pretty well shown to be more deadly to the mitochondria, to the microglia and associated with suicide.

Kirkland Newman:

And so what causes the tryptophan to go down that kynurenine pathway as opposed to the serotonin and melatonin pathway? Is that because of the inflammation?

Dr. Mary Ackerley:

It seems to be the inflammation. And it's the major reason why you see people having what I call paradoxical reactions. Lots of people are put on antidepressants and they really do feel better. And I'm not arguing against it. I think I love your word sustainable. It's a quick fix. And I'm certainly willing to do that if it gets you to a place where you can address the other issues that are clearly there. But sometimes you'll give people antidepressants and it will flip them. They'll become severely suicidal, insomniac, feel the worst they've ever felt and blame it all on the antidepressant. Well, it is, it was too much serotonin in a brain that's inflamed that just dumped right down the inflammatory pathways.

Dr. Mary Ackerley:

So when you see that, it's a very clear call to me, not that antidepressants are terrible and I need to go join the society and blame people forever about how awful they are, but your brain is inflamed. It's about as clear a mark as we get, you need to start looking for the food, everything we've just talked about in more.

Kirkland Newman:

And so treatment resistant depression, in your experience, you could say that is really because of inflammation. So if there's inflammation that will cause treatment resistant depression, in your experience.

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r. Mary Ackerley:

Right. Absolutely. It's the first thing I think about and what a lot more doctors and psychiatrists too, even in patients in particular, it's like, yes, I have treatment resistant depression, meaning we've run out of drugs and I still feel miserable. That's when they maybe find on a patient book, there is mould growing in the basement everywhere. I was bitten by a tick 10 years ago, et cetera. No one's ever talked to me about my diet. And I still hear that. And I'm also not going to say that we know everything, because I've been doing this a long time. And I will say, I do have a few patients where nothing we do seems to be able to flip them into a more normal mood. And I wish I could say, but it's part of the quest, there has to be something more, why can I get 95% of people better doing this and another 5% I can't? So I think that probably drives me and other people too. I don't like the fairy tale stories of yes, and if you eat this and do this, 10 things, now you're going to feel better. 50, 60% of people will, but it gets very, very complicated at some level of why we can't unflip these switches.

Kirkland Newman:

I completely understand. And also I wonder, because there is a whole trauma piece and adverse childhood experiences piece, and that interacts with the biochemistry and leads to biochemical imbalances. But I think it's all very well to take a very biochemical approach and say, "Let's fix the diet, let's give supplements, let's lower the inflammation," but there is, unless you're also dealing maybe in a somatic way with the trauma or with the-

Dr. Mary Ackerley:

It's why I become so fond of, absolutely the best research we have in medicine, I think, is adverse childhood experiences. Really if you want to look at really strong evidence bases is adverse childhood experiences lead to worse outcomes in every illness you look at and mould and Lyme and PANS are no exceptions. So people say, "Do you think my trauma is affecting me totally?" And it's absolutely the people that take longer. And everything I've learned, I try and use. And some of the things are, I'm not a big fan of addressing it again and again at all, is I think we've shown that a while ago is that you really need to stop activating those pathways and get the body to release.

Dr. Mary Ackerley:

So sometimes I still am a detective even on there. And therapy in that case is useful, but mostly I've learned to love things that involve moving the eyes, moving the body, freeing up the vagal nerve, releasing trauma and ways that we shake and stuff without talking about it so much. Getting people to feel safe is really important, especially when we're telling them, "Hey, you need to live in a safe place," and they're running around the desert here. And this gets to me in tents and cars, which there's no way you can feel safe and grounded when you're escaping these toxins and changing basis all the time.

Dr. Mary Ackerley:

So I'm really aware of safety. And we'll sometimes say, maybe it's better you're living with some exposure, but the home is okay and you can pay for it and we can work on it. We can keep working on these things as you grow. So I see panic driven behavior all the time. I am working on a book and certainly is a chapter on panic driven behavior, which is probably the surest way to ensure that you are not going to get better, is to be running in panic from doctor to doctor, solution to solution, campground to campground in this total state of panic, where nobody can really talk to you or tell you, "Take some deep breaths, let's throw out half the supplements and just work with what's here and try and get a plan of getting..." And when people can't do that is such a sure sign they're being driven by their sympathetic nervous system, by trauma. And if you can't get a person to relax, take deep breaths and sleep and

digest, you just see more and more messes. And some people have a lot of time and money to make messes and I've watched it, they just keep going.

Kirkland Newman:

I think that's such a great point. And I interviewed Stephen Porges on the polyvagal theory and, of course, safety is such an important concept. And without safety, you can't heal, the body can't heal. Exactly. And you talk about EMDR and you talk about essentially somatic therapies. And I think one of the challenges that we have certainly in the UK where I'm based is that the nice guidelines, the main governmental NHS guidelines are CBT, which is cognitive therapy. And that doesn't really work for trauma and it doesn't really work. And you have to work with the body and you have to have these somatic therapies. And it's not yet in mainstream medicine to practice these somatic therapies. And so I think it's really great that you, as a psychiatrist, have recognised that, because I think a lot of psychiatrists say, "Okay, we'll just do CBT," but that's not going to help.

Dr. Mary Ackerley:

It's like with your SSRI, and the pace trial has been in my mind has been totally discredited there with CBT and gradual exercise for chronic fatigue. When people got the data and we did it, they showed that the exclusions and the ones that have been thrown out made an enormous difference on the conclusions which were reached. And I think it's been totally discredited. However, the huge government agency paying for everything is not going to let go of this. And in some ways there's nothing wrong with getting people to exercise and move. It is just such a good recommendation. And I love doing it without having to say, "And we're going to release the trauma of what happened to you as a child." I was like, "You're going to do Yoga and you're going to feel some shaking." You are not going to keep talking about it.

Dr. Mary Ackerley:

So I'm very well aware of it. And I do try and get people to at least recognise this is a piece of your medical heritage. That is not a shameful thing, it's incredibly common, but needs to be released for the body to access its own healing powers and stop running from the tiger, being running from whatever, because when you're running your body's just not going to heal. Stephen Porges's work pretty much sums it up is that's why the vagus nerve is so important.

Kirkland Newman:

Yeah, I love that. You're absolutely right. And then the other thing in terms of the consequences of neuroinflammation, so there's the decrease in neurotransmitters or the affection of the neurotransmitters, but also the damage to the HPA axis, which leads to the overproduction or underproduction of stress hormones. So the stress hormones are essentially brought out of balance by neuroinflammation. Is that correct?

Dr. Mary Ackerley:

Yeah. It's the dysregulation, because some people go up, a lot of people go down. It's not as well recognised, for instance, in mould, it completely disturbs estrogen balance by inhibiting the aromatase. So basically you see a lot of men with low testosterone, a lot of women with very high estrogens, in fact, to the point they need transfusions, they're bleeding so much. And that is something again that removing the toxins really can bring back balance in the whole androgen estrogen balance. Cortisol,

adrenal fatigue... I always laugh, someone comes and says, "I saw someone and they said, my problem's really adrenal fatigue." And I just laugh and it's like, yes. It's like we're micromanaging. It's like going to ignore the elephant in the room of what's causing it and yes, you have adrenal fatigue. Your HPA axis is off, because of the insult by the immune system, the insult by the hormones being out of imbalance and the brain itself being inflamed.

Dr. Mary Ackerley:

One thing is there are mast cells very much in the ventral diencephalon, which is right above the hypothalamus. So you have the thalamus and the hypothalamus, mast cells are really going to affect it in profound ways. And that's part of neuroinflammation in the brain too. So getting the limbic dysregulation going is going to then profoundly make the panic driven medicine even harder to try to slow down. But that seems to be from everything I see when I look at people's brains is inflammation is going to the limbic system, to the amygdala, to the hippocampus, to the thalamus and just driving all of this.

Kirkland Newman:

Slightly complicated, because it's also what is driving what. Like stress and trauma will drive inflammation of the limbic system. Presumably they'll drive inflammation, but equally inflammation caused by a biotoxin will drive stress. So you're getting it from both ends.

Dr. Mary Ackerley:

Right. And that's why we see so many sick people. Basically people say, "Well, it's not just mould," and you're totally right, it's just listeria for a lot of people and being able to do it. And it's the one thing we can fix. We can clean up environments. That's why I see it has been so important to me is because when I started this mould was crazy and I knew it was crazy. I'm trained, this is crazy behavior. To get everybody at least talking about mould and looking forward and not assuming it's okay is making a difference already in getting treatment. So yeah, they're all contributing. We have a hierarchy or a level of which we found usually moving starting to work on the major drivers. Biotoxins and mast cells start to slow down most brains enough. We start to get a little more rational behavior and that we can work on some of the immune systems, some of the infectious insults too, and then eventually start working with the whole heavy metal chemical load everybody has. And in all of that, working very much with ancillaries, foods and exercise and diet. There's really an order in which you take out the main drivers of inflammation and you can start to work on everything else.

Kirkland Newman:

Yeah. Fantastic. And then the other thing you talk about is excitotoxicity, which essentially is over activation of the neurons, which can lead to anxiety symptoms. Is that-

Dr. Mary Ackerley:

It's glutamate suicidal ideation and MDA. Ketamine is sometimes helpful in that. So that's definitely another route. And some of that is genetic pathways, is just some of us are much more predisposed to not be able to break down our glutamine than others. And some people, glutamine makes them intelligent and fixes their gut. And for others, it just drives them into severe anxiety. And that piece, I think, a lot of it is genetic.

Kirkland Newman:

And so then your inflammation leads to excitotoxicity. Is that how it works?

Dr. Mary Ackerley:

Yeah, I would say so. And again, I'm thinking a lot of the causes are TBIs, which create a break, the blood brain barrier is supposed to be violent. We're not supposed to be talking about it all the time as being inflamed, it's supposed to be a wall in your brain that protects it from all these pathogens and toxins. And it becomes quite permeable in people and things start getting in more easily. And when they start getting in more easily, you're not only destroying some neurons and others, you're setting up pathways and cycles so that they start reproducing more or reproducing the wrong chemicals. And in fact, the microglia themselves are making some of them and they're getting aggravated. So there are lots and lots of ways. And is fascinating, you can look at it like, "Wow, that's how it's presenting in this person and that's how it's presenting in that person." And I am very interested in that.

Kirkland Newman:

In all the different ways. And then in terms of neuroinflammation, we talked a lot about the causes of trauma, stress, ACS, biotoxins, infections. You've touched upon heavy metals, food allergens as well, I think you've mentioned, but these are all things that-

Dr. Mary Ackerley:

Something I've left out here. I'm sure there's something more to say, but you didn't say this. Yeah, it's a pretty depressing list of what's wrong.

Kirkland Newman:

I know. And then in terms of obviously what we can do about it, you've talked about diet, exercise, key supplements. You also mentioned in your article, turmeric and vitamin D as good anti-inflammatory supplements. And in terms of protecting ourselves from biotoxin illness from heavy metals, once we have this stuff, what can we do about it? How can we detoxify? How can we get rid of them? And the other question I have is you mentioned the sinuses, the teeth, and I know my mother, for instance, who has dementia and she's always complaining of sinus infections. Her nose is stuffy, she's got this sinus problem. And I really think the two are linked. So how would you suggest dealing with this?

Dr. Mary Ackerley:

When you get to the level of dementia, it definitely is harder. And that's what we're trying to prevent. But in terms of biotoxins or mast cells, which I've done a lot of, is you have to get out of exposure. And when we're seeing all the symptoms, and there are certain labs like urinary and inflammatory markers that are high, there's mould here and we have to find it. And some of that article is about the inevitable fights that go on, because this involves money and society. And there's usually one person in a couple who's sicker than the other person. And so there's a whole lot of stress around getting into a clean environment. And in a clean environment, we also start to address some heavy metals, because still, even though we've outlawed lead, a lot of people are still living in homes built before with paint that was improperly removed and stuff, or with pipes. So lead is an ongoing issue too in homes.

Dr. Mary Ackerley:

Anyway, getting out of the environment just has to always be at the forefront, because most of us found over the years is until that happens everything else I'm about to mention doesn't really work very well. So after that is we are trying to pull it out and you can do that while you're still in exposure, but there's a whole science of binders, tons of different binders, but clay and charcoal work for all of them, have been used safely by humans, for animals for many years to detoxify themselves. They have no hesitation saying, look at some of the binders, they're called available that have clay and charcoal. They're safe. Other things need prescriptions. They're stronger, they're faster, but you want someone knowing what they're doing.

Dr. Mary Ackerley:

And there are people, a lot of people, if you want to be smart, as you start to understand all of this, who take a clay and charcoal binder every night, because they know they've eaten stuffs that probably had toxins they weren't aware of, they may have been exposed or they may just be in an ongoing process of unloading exposures from the past. And they feel better when they do some clay and charcoal every day. So it's been used for a long time. So they're binders. And I've always been very interested in the nasal infection. Some of them are bacterial called markers and others are fungal. And most people as usual, it's going to be a combination of both. Plus it's sinusitis. Again, the teeth are very linked here to the nose to the eyes and everyone keeps it separate. In the brain we don't even want to talk about. That's a whole different specialty, is the pathogens are traveling in all these compartments and leading to all those sorts of issues you've heard then about the nerves and the cervical nodes and inflammation.

Dr. Mary Ackerley:

So treating sinusitis is really important for people. And a lot of people have the infection without even having the sinusitis. When people have sinusitis, the actual rate, some studies I was looking at this one says, the rate of anxiety and depression is 50% associated with sinusitis, the original brain-fog people. And that's evidently well known to ENT, not the rest of us, is that makes people very miserable. And if you've ever had a sinus infection or have allergies, which again, as you get older, the more you get allergies. That combination is miserable. The brain doesn't work as well, most likely, because of toxic influences, going very easily from the sinuses into the brain, which we know is meningitis in the worst cases. But we're talking about the slow chronic drip and your mother is probably quite right. She knows that there are days when her sinuses work and she feels much better than when they don't.

Dr. Mary Ackerley:

I think one thing I know we're going is that I think when I started this, I didn't know much about sinuses, I didn't have allergies at the time, I didn't , when you live in Arizona more than three years, you're going to develop allergies. I held out for 12 years, at some point, I started getting allergies that are incredibly common. They are annoying. There is a substance very easily available called XLear, capital X, capital L, E-A-R. It's just xylitol, comes in a little spray bottle. They've actually done some research recently. They showed a killed COVID in the test tube. We knew it's antibacterial and antifungal. That does not mean it's going to cure COVID, now, if you have it.

Dr. Mary Ackerley:

However, they're doing trials on the prevention and it was just chuck another one up for what I've been telling people, is brush your nose the way you brush your teeth is to use nasal hygiene. And my advice for a lot of people these days is use xylitol, exceedingly safe. And for many people it's like, "Oh, my

sinuses are relaxing, I'm talking, I feel good, because it works quite well." And use it in the morning. And then when you get back, take off your mask, you use it again, if you wash things out fast, they have some research showing you really decreased cold, even transmission in the household if everyone's using neti pots. So just a word to everybody is XLear, very easily available and may make you feel better and may be preventive for a lot of things besides COVID, prevents big things from entering all the other cracks and crevices where it starts to grow.

Kirkland Newman:

100%. Well, that's fantastic. And ironically, I just ordered some today for my mother, my total coincidence.

Dr. Mary Ackerley:

She'll love it. Just start her with the mildest one and get her used to it. But it's much easier to use than a neti pot. I use a lot of those things, and recommend them. We're always trying to clean this out, but XLear has been the easiest and works the most consistently.

Kirkland Newman:

I totally agree. Now, you've been so generous with your time. So we're going to wrap up now, but there was just one more thing in your article. You talked about purpose, a sense of purpose and happiness as also eudaimonia, contentment helping others as being also important for this piece.

Dr. Mary Ackerley:

Yeah. It's funny how I forget that. And a lot of people I think most do, but the research is there, that at that epigenetic level, level at which you still have the most control over your genetics. And we all have good and bad genes. If you've done any 23andMe or anything none of us have a clean slate. It just doesn't happen. We have great genes. We have okay genes. And we have genes that are dreaded in some ways. And you want to keep those from not expressing the epigenetics, that's the science, that's the safety, that's the vagal nerve too, again, is not turning on a sense of trauma that gets them going. It’s serving others, just having eudaimonic versus hedonic happiness is people who are devoted to their own ends, who are selfish, who have great cards, great houses, great smiles, that sort of thing. At the genetic level, it doesn't do nearly as much as those people who are out feeding the homeless, giving to the poor, knowing they help other people without directly involving their own pleasure and maybe it being a cost. So that research has been done. And that is really interesting. And I will still sometimes tell people where I'm really stuck is why don't we try volunteering at the animal shelter and walking the animals, which again, with COVID that's... But in general, it's just that's a safe thing for some people to be able to at least help animals.

Kirkland Newman:

Yeah, that's fantastic. You've given us such an amazing overview of all these factors and inflammation and how to lower the inflammation, how to have better mental health, how to support our various pathways, et cetera. It's so helpful, Dr. Mary Ackerley. And I'm so grateful for your time. I don't know. I think we've covered most things. Is there anything that you want to add?

Dr. Mary Ackerley:

No, I think when I listen to all of this and I am beginning to organise my own thoughts to write more for people and stuff, is that we started out talking how do you treat the brain? I started with the smallest things, the small steps every day, like doing XLear, like doing a little bit of exercise, hugging someone's cat, and eating, like dropping the brownies or at least going to the no sugar brownies. Small things every day are going to give you greater gains than ignoring all this and then bam, oh my God, what happened to my life? But unfortunately that is where I see most people is they get a wake up call, we call it an illness, and then have to start back engineering.

Dr. Mary Ackerley:

And that's really where I've seen all the long haulers I've seen so far, no different. They got a wake up call, it wasn't mould, wasn't Lyme, wasn't strep, it was COVID and they thought they were well. And now they're having to back engineering. So again, it's a plea for people to take care of your health in these ways. And you're probably going to do much better without worrying about every single step in every single toxin.

Kirkland Newman:

100%. Well, thank you so much for those very wise words, Mary. I'm very grateful. And thanks so much for being on the show.

Kirkland Newman:

Thank you so much for listening to the MindHealth360 Show. I hope that we've helped you realise that mental health symptoms have root causes that can and need to be addressed in order to sustainably heal. And I've given you some ideas about steps you, your loved ones or clients may take to start their healing journey. Please share this interview with anyone you think may find it helpful, and don't forget to subscribe, to keep up to date with our latest interviews on integrative mental health.

Kirkland Newman:

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