Introduction to EMFs and Lyme Healing

Everyone. Welcome back to this episode of The Healing from Lyme Disease Summit. I'm your host, Dr. Tom Moorcroft, and you're in for an exceptional treat.

Today we get to hang out with Dr. Bill Pawluk, Dr. William Pawluk, MD, a good friend of min3e that we've kind of been developing a relationship over the last several years.

He is an expert and kind of the world's foremost expert in EMF. And it's a topic that comes up so much in the treatment of Lyme disease and recovery from any kind of chronic illness, protecting your health.

And it's we've sat down and had conversations not only about the science and the practical application in some of our sick patients, but also just broader conversations about promoting self-healing.

Getting back in touch with, you know, our environment, all the things that we talk about all the time so that we're not only connected with our internal ecosystem, we're connected to our external ecosystem.

And with PMF, it can help us when we're stuck somewhere and even if we just want to supercharge things. So. Dr. Pawluk, I'm super excited to be able to, you know, shed some light on such a complicated topic.

And I can think of no one better who knows more and can actually put it into like terms that we can both physicians and the lay public really understand.

So thank you so much for being here. Thank you to I really appreciate you being here and seeing you again. It's always so much fun because I love talking with people who we were talking right before we popped on.

We're going to at the end will let you know about some of Dr. Pawluk's books and references and resources that are available to learn more about PMF. One of the things he was talking about is like, Well, if you want to geek out, you get this book.

If you want to kind of just geek out a little bit and you really want to get more practical application without the super geek effect, you would get this other book.

And so he really knows how to serve our populations so well. And today I'm really excited. And, you know, we decided we're going to talk about EMFs and how they have 27 different actions that could help heal the ravages of Lyme disease.

And so a lot of times in my augmented title of a talk or something, Bill but I love this one. And one of the things I'd love you to maybe tell us about is like, what are EMFs?

And maybe tell us a little bit about your back story, how you got into it. Then we can dove into how we can, you know, all these different actions and how these really can be helpful in people suffering from Lyme and other things like that.

Oh, thanks. My background basically is family medicine and I was a medical director and a chief of family medicine for a big group in in the New Jersey area.

And we shared patients. We made rounds together as a group. And in the span of about a week, within a week, we had two admissions to the hospital, people almost critically ill from GI bleeding, gastric bleeding, common factor was ibuprofen.

So I started to ask myself, this is stupid medicine. I don't have any better solutions and narcotics are not a better solution. Surgery is not a better solution, and so on.

So what could I do? So I said, okay, well, I've had this in my back pocket for a long, long time. Now I'm going to go do it, which is not to do acupuncture, studied acupuncture.

And then at the end of my training, I wanted to do acupuncture, but nobody want to do needles. People didn't want needles. They didn't understand the needles were very thin and they were not very painful, but something we didn't want needle.

So I had to find a different way to do acupuncture. And I discovered magnets. And the more I worked with them, the more I became enthralled about what they did.

And it was not just acupuncture. That's one of the clear benefits of chemotherapy.

How Magnetic Fields Work in the Body

It's acupuncture. So every time you lay on a magnetic pad or mat, you're stimulating the entire acupuncture system of the body. So rather than having to put out to figure out which needle and which point you need or which point or which meridian you need at any given time, one of the ideas would be just treat the whole body and the body will take care of itself.

It's one of my favorite concepts and everyone at the summit probably heard me say it ad nauseam, like, really? Like support the body's self-healing mechanism.

So, you know, one of the things about this is maybe you could define for a sort of what a EMF is. And then I think if we're going to define what that is, maybe we should also dove, you know, dig in to what an image, what EMFs are.

Because I think that like we hear one as probably positive, we hear the other one is probably negative. And, you know, if we can compare and contrast and this, we have a good strong jumping off point for the rest of the conversation.

Well, let's start with that's a good one. That's very important. Get the elephant out of the room right away, because it's the first day people ask me very often, but what about what about heatmaps?

They're dangerous, etc.. We hear about five G and seven G and Benji, whatever else is coming. EMFs, which I call environmental magnetic fields, they are electromagnetic fields, but they're environmentally produced.

And those environmental magnetic fields are primarily microwaves, microwave towers, cell phones, wi fi. All, all of that is EMF and they're dangerous because of their, the fact that they're microwaves.

Mm. And the problem with microwaves is that they get absorbed by the body, they don't pass through the body because the wavelengths are too short. So they get absorbed and because they're absorbed they then cause heating which then causes DNA damage, DNA effects and heating of tissues.

So that's the purpose behind a microwave oven is the heat. So you're cooking things. So people who put a cell phone to their ears and hold a cell phone, they're you want to take it away.

You can clearly see the ear is quite red. Right. And the other ears red, too, but not as much as the as the primary ear. And so if you have a cell phone attached to your head for hours and hours at a time, we now know that there's an increased incidence of acoustic neuroma, that people will keep a cell phone to one side of their head all the time.

But we should not be doing cell phones without the earbuds. Preferably not even earbuds, preferably acoustic. Just. Just on what voice? Right. Like the speaker phone? Yeah.

The speaker phones or or other ways of broadcasting the tube. Yeah, like the air tube. Yeah. But they're not very precious. We can't hear that very well.

So I just say I just put our voice so. MF broadcast into the environment. They're like radio waves and television waves and radar and and sunlight and color lights, etc.

They broadcast in the environment. So they go on forever and they are wavelengths like the waves at a pond. They go on for forever. P EMFs are very restricted, so that's what MF and I call open loop.

They go out, they don't come back, they don't close on themselves. P EMFs, on the other hand, are created by current flow through a wire. So let's say my thumb is the line at the wire carrying the magnetic, carrying the current.

That current is then producing with every pulse of that current. That current is producing magnetic field, but that magnetic field goes up and it comes down as the current goes up.

Magnetic field goes up. So that current that magnetic field basically is collapsing on itself. It's always opening and collapsing. Opening and collapsing.

And a stronger the magnetic field, the bigger that, the stronger the current. The voltage goes through that wire, the stronger the magnetic field. So you can design magnetic fields or basically go right through the body completely.

Mm hmm. Cause they're very long, you know, they're not a wavelength, just a pulse of a magnetic field going in and out of the body at that pulsation that creates charge in the body.

So we know doctors are aware now of many people are now aware also of devices called TMS transcranial magnetic stimulation that are used for treatment resistant depression and are FDA approved.

Well, their sole purpose is to replace electroconvulsive therapy. Right. And they're much safer than ECT, but their goal is to produce current in the brain and that current then wakes things up.

Now, while they think that they're only stimulating one part of the brain left prefrontal cortex, actually that current is going through the whole brain.

So the effects are not just in that prefrontal cortex area, the effects are through the entire brain. So the magnetic field spreads through the whole brain.

The charge production suppression of the whole brain. So that principle of creating charge is exactly the principle that we rely on. And this is why I basically tell people that intensity matters.

The intensity, the magnetic field matters because it's the intensity, the magnetic field that produces the charge in the body. So the body and the way that charged is produced in the body is that it's interacting with all the ions and all the charged molecules of the tissues of the body and has the magnetic field passes through those flow through those tissues, it goes all the way through without obstruction.

A magnetic field is like the wind in the trees devastating. The trees. It starts to move stuff, but it keeps on going. So we do the same thing with magnetic fields.

They're basically created. We know the magnetic field by its actions. So you talk about the 27 effects of impact. So we know it by its actions, but what it's doing is increasing charge in the body that that charge is used by the body.

So the magnetic field doesn't doesn't do the work. It's inducing charge in the body. And the body uses that increased charge that to do whatever work it wants to do.

Mm. I can't dial of those 27 actions of magnetic fields, I can't dial a single action, I can't dial circulation, I can't dial inflammation, I can't dial pen reduction, I can't dial acupuncture.

The body's going to take that signal and do whatever it needs with it. And the body prioritizes what it's going to do based on what's easiest with the magnetic field is what the tissue is, what the pathology is.

So the body makes the decisions on what it's going to do with this new energy, this activation that we've just given. It just wakes everything up, you know?

Frequency vs Intensity in PMF Therapy

I mean, this might be one of the reasons that I've I've loved it since the first moment I've been on a pad, and I actually even have one of mine right here with me because I keep it at my desk for when I'm at the desk longer than I want to or, you know, but it is interesting, like a lot of like I kind of like tweaked my my knee that was previously injured in sports stuff, you know, a few weeks ago.

And that's like I put it right over it and it's like all kinds of other stuff happens first and then the knee kind of, even though I put it right over it.

So questions that kind of come up for me is because I mean, this is one of the things that like with stem cells, osteopathic treatment and even like acupuncture that you mentioned so many of our healing modalities and I think this is so key for the people in our Lyme community is that the body is going to take the charge, the the medication, the herb, and do with it what it needs to do first.

Now, certain medications in particular made target a certain area, but still we get results that we're not really expecting all the time because the body's so unique and so wise, what about like, you know, because we I you know, we've talked in the past about different machines that I've had and other people have used.

And, you know, what about like frequency? And then and of the different fields or position on the body, I mean, can these help us move in a certain direction of healing or is it just kind of like we just need to get to high intensity and and make, you know, for it to work and let the body do its thing.

The problem with frequency is that every molecule in the body has a frequency, and the range of frequencies in the tissues of the body is vast. It goes up into the gigahertz range.

Even the body produces radio waves as well to try to figure out a frequency when you're like, I'm going to pick ten hertz and I'm going to end this ten hertz at at a cell.

Well, how many how many of the functions of the cell are based on ten hertz? Mm hmm. Very, very few. Now, there are harmonics, so there are multiple tracks, too, for that ten hertz to multiply itself and different effects down downstream.

But the thing is, is that ten hertz is not the only frequency picking the frequency. And this is one of the problems that I have with right machines because I think RIF machines work that principle is make sense.

That's all based on resonance. But pick the frequency. And if you look up the books on, on Lyme disease, for example, or you look up the books on brain injuries or cancer or other kinds of infections, there is not just one frequency.

They give you a bunch of frequencies. And how are they discovered? Trial and error? Mm hmm. Not by not by controlled research. And so what happens is that why do you have five frequencies for calcium ion resonance?

Because there are more than five frequencies for calcium. And it depends on where the calcium is in the tissue that it's in and what it's combining itself with and so on.

So I think frequency fundamentally is way more complicated than it needs to be or can be as a result. It's very hard to pick and be right now another factor relative to frequency.

So frequencies again like EMFs are broadcast in the environment. So frequency is a bit like that. So every molecule, every color has a frequency. And where does that where it's an open loop, right.

Basically just goes out into space. So what we're talking about then is trying to confine the frequencies or the pulse rates we get. We call them into the particular target.

So you can design, say, for example, you do ten hertz. Is that as an example? Again, that's a very common frequency for healing. Let's say you have to go from 0 to 100.

Let's say you're climbing a ladder and it's going to take you X amount of time to climb the ladder from zero to the peak. So let's say that time is 5 minutes, 2 minutes, and that frequency pulse going up to the peak of the ladder is going to take that amount of time regardless.

And so therefore, if I let's say that's ten hertz, right? Ten, you can take ten, ten cycles per second to get there. Let's say I decided on doing 20 cycles per second, much faster.

You're not going to get to the peak. You cannot achieve the peak in that time, that short period of time. You're having the amount of time for you to get to the peak.

Right? Because you're having the time. Then you decrease the intensity because the peak, the top of the ladder is the peak. That's what you're aiming for, the top of the ladder.

So again, as you change the frequencies, you're changing the intensity. And so very often we I have a very hard time differentiating intensity effects from frequency effects or pulse rate effects.

Is it the pulse rate that's doing the job or is it the intensity that's during the job? And sometimes it's a combination of both, but there's very little research holding those values past.

Got it. So in other words, when you're designing magnetic field devices, there are billions of permutations and combinations. So that's an impossibility for practical research.

But my experience then with 30 years of doing magnetic therapies is I have discovered that intensity makes that makes the big difference is not the frequency so much.

And and so it's so interesting because so many of the devices that I've kind of seen over the years either have like one setting or a bill, like not literally a billion, but essentially a minimum of 100.

I'm like, what the hell one do I even use? And it's like to me it was always like, well, I was cranking up the intensity just because like, you know, for each person for what it felt like they could handle when you're in the room with them or if they have one at home working to adjust that.

When you say intensity though, like what are you looking for? Because I mean, I know one of the reasons that so many people come to you and consult with you and your team, grab your books and such are because you're like no holds barred, no best, like, here's the research, this is how it works.

And when we're looking at different machines and not to get it, we don't have to get into that. You can do that. On the consultation time and what to buy and what not to buy.

But I mean, like from an an intensity perspective, is there a certain minimum sort of power, if you will, that your device can needs to be able to create?

Or should I be redefining the words? All right. So if you take those 27 different actions, there is not enough research to say what the optimal signal is for each of those actions.

But the one I tend to work off the most is inflammation, because almost all conditions, all health conditions,

including aging, are all all related to inflammation.

So inflammation research has found, in fact, that 15 Gauss Gauss is a measure of magnetic field intensity to us. S So 15 Gauss is the optimal magnetic field intensity to decrease inflammation.

Now the this is all done by the adenosine receptor which sits on neutrophils and neutrophils are where. Everywhere in the body. Right. So this know. The cells themselves right.

So what happens then if the goal is to give you 15 gauss to provide the optimal magnetic field intensity to work at the adenosine receptor, then you have to do the calculation like we do with radiation therapy.

You have to calculate the dose you try to deliver into that part of the tissue. So 15 Gauss would work superficially just on the surface of the skin, but if you going deeper into the body the other side of the wrist, you have to then calculate the loss of the magnetic field over that distance.

So a 4000 Gauss magnetic field will drop off to 15 Gauss in four inches. That's pretty interesting. 4 to 6 inches. So if you try to treat a cross, a brain with neural berlioz's said, you have to calculate the magnetic field intensity to be delivered on the other side of the brain.

The good news is the body ignores what it doesn't need. So other words, we exceeded what the body needs. The body basically ignores it. So the goal then is to deliver 15 gauss across the brain or across a lung or across a shoulder or a hip or a belly or a liver, heart, whatever.

So you always do that calculation. And my book, Supercharge Your Health, has a table that shows you the intensities you need to deliver 15 Gauss at a distance.

I also have it on a blog, on my website, drpawluk.com on adenosine inflammation and pain. So adenosine inflammation and pain and that table that gives you the objectives for what you should be getting to to target deeper into the body.

Choosing the Right Device and Intensity

Now, if all you're interested in is creating a tennis elbow, you don't need a high intensity, right? You don't need some. Maybe you only need a minimum of 15,000.

Right? But if you're going to say half an inch into the body, going into the tennis elbow area, it's very superficial. So it's like within a quarter inch, maybe half an inch, depending on how much of an area around that tennis elbow is involved with inflammation.

So let's say you need 50 or 60 goes to do an adequate job of a tennis elbow, but then who doesn't need anti-inflammatory treatment in the body? No one I've met.

That person who has a tennis elbow, has a need for prevention. That person with the tennis elbow has other problems, usually going on right as well. It's rarely just a tennis elbow problem, but they're ignoring other things because they're not interfering with their life.

So so I don't need to worry about that. Let me just focus on the tennis elbow. So then you buy a little device like you have, which is perfect for a tennis elbow that's 200 gauss.

So that's a nice magnetic field intensity and it will do superficial things pretty well. But it also interacts with the acupuncture system and it interacts with the nervous system to do other things as well.

In terms of tuning the body or tuning the brain. Yeah, I think it's interesting too, because having like a whole pad that's much stronger or having the ability to move a smaller thing in different places and travel with it, as I do quite frequently.

It's nice. And also like I find that you can put certain things in certain areas if you're working with the practitioner to know how to stimulate different systems in your body.

I guess the other question though is like even just looking at your website, there's a lot of different systems out there. If I go beyond your stuff, there's even a gazillion more and I know that you vet what you work with, which is why I use you as my primary resource and all this.

And then I just go check the research because you're just referring to the research and which is great, which is to me as a scientist, the most important thing.

And then adding the art of the medicine on top of it obviously is how we treat our patients and our families, but what types of peer to peer EMF systems are kind of like the best ones to to look at for healing?

I mean, there's, there's things that set one up apart from the other. Well, this is the Lyme summit, right? So to get Lyme disease, then when I talk to a Lyme and individual Lyme disease, I know it's a it's a system problem.

Yep. It's not just a heart problem or a brand problem or a skin problem or a gut problem. Right. It's a system problem. So while we want to treat a specific area, maybe a particular problem like the brain, but we still want to treat the rest of the body because if you don't treat the rest of the body, you have to maintain a healthy body for the body's resources to be able to be marshaled where they're needed efficiently.

If you have too many fights going on in the body all over the place, then the body doesn't have enough energy to give work really focus the needed. So I usually aim for intensity and I've compared all kinds of devices and I look at price, I look at convenience and ease of use.

And so my book, Supercharge Your Health, has tables that tells you if you want to treat locally, do you want to do mild? You want to do moderate, you want to do strong, you titrate regionally.

So you have to treat a chest or a belly. Then do you need again, again weak magnetic fields, medium or strong? If I'm going to treat a belly, unless I'm treating the skin on the belly, that's a big area to have to go into is not only deep, it's also wide.

So you want to get the whole belly, then you're going to need a stronger magnetic field. And so we're talking typically we're talking, I would say, a minimum of about $5,000.

If you're doing if you're doing a device that only delivers 2000 Gauss, you're going to get some benefit, but it's going to take you a lot more time. You have to do a lot more treatment time to get enough benefit and quickly enough at that.

So when you go to a doctor's office, the doctor has a machine. They have a very expensive machine that's high intensity. So you can feel it right away.

You get the results right away because you're paying by the minute to be in that doctor's office to get treatment, right. So you need to notice that it's doing something.

I need to quickly. But you can't just do a five minute treatment or ten minute treatment and get results because healing takes time and you need multiple treatments to do the job.

We know that with physical therapy, right? We know that with sports trick, sports training, athletic training. You're not going to get off the couch and run a marathon just by doing a few jumps and.

Oh, no. Right. And using a rope. Skipping rope. That's not going to be enough. You don't have to train for weeks and increase and increase and increase and increase so that you can eventually get to the goal you're trying to.

So we have to know the body. We have to know the pathology. We have to know the depth that we're trying to treat

and exactly what we're treating. And once you understand that, then you have to have a better sense of the parameters you you have.

So the book Supercharge Your Health has I review 80 different health conditions and I provide a recommendation and a protocol for those conditions. And I also recommend supplements.

It's so good because you have there I mean, there's thousands and thousands of articles out there and. MF, it seems like, and definitely some better than others, but there's a lot of misinformation I think, out there and having a protocol that you can refer to and one that's, you know, maybe disease or illness specific and you know, or I think it's just such a useful piece of information because it is confusing.

You know, it's interesting. I'm in for Lyme. I mean, you know, to me, again, it's a system thing, just like you said, it's certainly a a place where you see, you know, lots and lots of different things going down and people are reducing it down to certain symptoms and taking things to treat it, which I find is kind of like whack a mole a lot of times.

And we're not getting there. But of of all the symptoms that you hear from the, you know, all those patients over the last 30 some years or whatever what are the ones that you know line that MF in Lyme and co-infections mold toxicity are there any ones that really jump out as ones that PMF is going to they might notice sooner than just like, hey, I got to train for five months or six months on my map before I see it.

I think that's a good question and a very important one. The most common use of PMF therapy is for pain. Now, we're not we're not just talking about Tylenol for pain.

We're talking about not only Tylenol. So that's important. Maybe not something that reduces the pain right away, but the goal the goal is to heal the cause.

Mm hmm. I can heal the cause that you're going to be relying on something just to numb pain for the rest of your life. I call it numbing and dumbing. Right.

That's what we typically do. But we try to heal the problem. So you get some pain relief very quickly with PMI therapy, but it's going to come back unless you actually heal the cost of the healing.

The cause takes time. So I have I describe PMI therapy basically three phases this physiological response, functional improvement and healing. Healing is part of all three of those.

Right. And functional improvement is even more right to healing than a physiologic response. So physiologic responses, improving circulation. Mm hmm. A physiologic response is reducing inflammation.

A physiologic response is it's a well, it's not stem cells. It's basically a healing response. So decreasing inflammation, improving circulation and pain reduction, those are physiologic responses that happen fairly quickly after that.

Then we go into functional changes which relates to healing and maintaining a physiologic response so that it doesn't sort of back, back off. So if you keep doing the therapy, that physiologic benefit, the functional benefit begins to stay.

It now, now begins to last. It doesn't regress, but that all depends on healing. So even though you're done, even though your tennis elbow is gone heavy, you heal the tissues right?

Right. You've taken care of what you sense.

PMF for Pain, Inflammation, and Healing

And what we sense is actually pretty numb. That's pretty dumb, actually. We're not we're not that sensitive. Right. Our nervous system has to do has to have a signal, get to a certain level for us to even notice it.

And before it even gets that level, that tennis elbow has been brewing for quite a while until finally it gets to a point where it says ouch. So when you're done with the ouch, you're not done yet.

And I had the I had perfect example this. I had a hockey goalie who lost his scholarship, this university scholarship, because he got a groin injury. He did the usual things for about two years, physical therapy, all kinds of devices and so on.

I got on a magnetic system like the one you have there. You walk constantly, continuously. So literally within two weeks gone after two years of fighting with all this pain was gone.

So what did he do being a young guy? I stopped using it. No, no, he did. He did, though, as he started working out way too much. Oh, now he was pain free.

So without understanding pathophysiology and healing responses, he overdid it too soon, too fast. Right? So basically he reinjured. Right. And I think that this is such an important piece of the stages of healing through this PMF protocol, because this is what we run into with our chronically ill patients forever.

They they just want to get little relief and then they get the relief. And it's like all that means I can go, you know, or I can crank up my protocol.

And so, I mean, I love talking about the functional improvement and then the healing response because it's so critical. It's not just it is a longer play, you know, because and you're that important, right, to to be able to heal.

And I always tell people, they go back to about 70% of what you think you can do and probably even 50% because you're kind of overdo it. But we want to do that.

And one of the things so interesting, Bill, is like we're talking about circulation and inflammation. These are things that everybody talks about in chronic illness.

You know, only bring down that inflammation and improve our circulation. So maybe our Raynaud's goes down, but also we want to be able to get to these small micro areas that all these organisms are hiding and they have messed up.

And we've got, you know, functional, hyper acquired ability and blah, blah, blah. But one of the things I find interesting, our emphasis and kind of the question has to do with we know in Lyme disease that not only are we trying to improve circulation and get rid of inflammation, obviously, but we're looking at things like biofilms or looking at persist or forms of these organisé organizations.

There you go, organisms. And then also, you know, even antibiotic and herbal resistance. I mean, is there any work that you know of that's been done with PMS that kind of, you know, kind of can support us in this area of persistence, biofilms, even antibiotics, resistance?

Yeah. Well, and I'm I was not all that familiar with biofilms and Lyme disease, but I just read a couple of articles about this. In fact, that skin there's a skin infection you can get, like what?

Granuloma kind of infection from Lyme disease in the skin and you can't eradicate because it's resistant to antibiotics. So the biofilm then basically creates a microcosm of an environment where you can't even culture the barrier out of that lesion because it's insisted it's dormant.

And you try to culture it. It doesn't culture, but it's resistant to antibiotics. In other words, it's not going to heal because you can't get rid of it.

It turns out the PMA therapy is actually very, very important for biofilm reduction. Now, is it the only thing I think you should still do enzymes, you should still do anti-inflammatory, you should do all the normal things that we would do.

But now activating the treatment with the biofilm, with magnetic field therapy, because the magnetic fields go right through the biofilm, and it turns out that the magnetic fields help the body by itself to fight infections, things called nets, traps, net traps, right?

So basically the neutrophils that trap bugs or traps, infections or pathogens, so they actually put out onto a fibrous network into the surrounding tissue where the pathogens are in that tissue and they trap them.

So that's why they call traps or perhaps increase those trap functions and they also decrease motility of the organisms in the body. So and inside a biofilm, what do you have?

You don't just have Lyme. I have a whole lot of stuff in those biofilms, right? And they're all talking to each other and they're sharing genetic information on how to resist.

So magnetic field therapy then allows access to those to that biofilm with antibiotics, with natural antibiotics, with medication. So I've I know I've had experience.

You've had it, I'm sure as well. People get months and months of IV antibiotics and they just don't get better because even with IV antibiotics, which shouldn't penetrate the biofilms, but they don't.

So now magnetic field therapy is going to activate all of this and make them work synergistically together to get a much more effective response and much, much faster.

But I think that's kind of the Holy Grail is how do we get in there and use everything together that together synergistically, you know, and a lot of it I love the word to use activating because it is that's what it feels like to me.

And you know, when we have people, it's like they're doing all the right stuff, but maybe they don't have the juice or maybe they don't have the right activation. They can't get in.

And I think that that's a a critical component. I guess one other question, too, is like and this is sort of like the Pandora's box of questions, but it's like PMS and mitochondrial function, you know?

I mean. Well, again, since the therapy penetrates cells completely, totally, it activates mitochondria. So it increases mitophagy, it increases autophagy and it stimulates a whole ATP cycle.

So magnetic field therapy. So ATP by itself, adenosine triphosphate is the energy molecule of the body, right? It's produced by mitochondria. So mitochondria that are poisoned or dysfunctional can't make ATP can make enough ATP to respond to the demand for ATP.

Any inflammation is an ATP hog. It just starved for ATP. So magnetic fields increase the production of ATP from ADP. But ATP by itself is not useful, right?

It's a supply. In order to release the energy from ATP, you have to strip off one of the phosphates. And that's done using enzymes right in the in the cells and in the membranes of the cells.

And so magnetic field therapy not only increases the production of ATP, it hydrolyzed the ATP with ATP ACS enzymes, so it strips off one of the phosphates and then recycles it again.

So make that feel therapy's constantly helping the body to recycle ATP. But there's a problem. ATP is used up extraordinarily rapidly. Every beat of the heart basically uses up the ATP that's available at that moment.

So if your heart rate's going too fast, you can't produce enough ATP, right? So magnetic field therapy augments the production of ATP, even in a starving heart, not only starving for circulation, but damaged by inflammation, decreased perfusion and decreased mitochondrial function and ATP production.

So that augments the value of the heart.

Biofilms, Infections, and Mitochondrial Support

I have a blog on my website about heart failure and when I was doing the research to produce that blog, I was just blown away by by the complexity of heart failure and how it turns out that magnetic field therapy basically helps with virtually all the components of heart failure.

Again, magic. Well, you know, it it it can be viewed as magic when we don't know what those parts are. And like the part I love, like I, I love asking the question about mitochondria because for me, one of the other pieces that we're always looking for is how to clean up those cells that you talked about, how to, you know, get mitophagy to occur, how do we promote autophagy, clean up inside the cells?

And a lot of these organisms we're all dealing with, they're intracellular pathogens that the cells are just kind of like not working optimally. They're just leaving them there.

So any time we can get the cells to kind of take out the dirty laundry, you know, so to speak, make such a big difference. And then to your point about the magic, you know, I always ask, you know, I tell I tell everyone is doing.

You know, we ask like folks to just give us a couple of questions, help let us know what they think is important about their topic. And then I get to, you know, do my own research and come up with my own questions.

But you're one of the people I love when you send things in, because one of your questions that you share with me is, can EMFs raise the dead? So I'm assuming that I can't wait to hear what this is about, but also I'm assuming this has to do something with the magical component about.

Although I have a disclaimer, PBF therapies do not raise the debt, but there's two kinds of dead, right? Right. There's a dead, dead and there's a living dead.

Yep. And we're not just talking about dead, the whole body being dead. We're talking about cells and tissues at different stages of destruction, immolation, a breakdown of dysfunction.

And so that's the living dead. So right next to you, cut yourself or burn yourself. That tissue is dead. Or you put or you cut through that tissue. That tissue is dead.

Now, the tissue around it is damaged, but not dead and if it's not treated correctly, if you're not given the proper support, it will die too. So what you have to do is support the living dead or the near dead, right?

So magnetic field therapy definitely raises the near dead. Are they living the dead that has the chance to to revive? And, you know, as you look at the whole system, though, as you've been talking, it's like so many that I'm just thinking like, wow, so many people I talked to and work with on a daily basis.

Like they probably wouldn't come in say, I feel like the living dead, but if you ask them, most of them would say, Yeah, a lot of times they did. In fact, I talked to someone earlier today like, look for the past four months, I literally thought I was going to die.

Like it just got so intense. And, you know, she knows that the symptoms she's experiencing are not life threatening, but they suck, you know, and you walk around feeling.

Like they make it depressed and they make you wish you were dead. Exactly. So I really like that analogy because and the cut is really important because it's like this is one of the things I tell people all the time.

If you want to know how to get better from Lyme, please work with a highly trained expert, not someone who, if you're sick for more than just a little bit, don't just start with a newbie.

Let's get with someone who has experience in this. And if not, like we even have our Lyme practitioner training certification program and our mentorship in case you're new, but you want to have backup.

And this is one of the things where if you're going to go buy a EMF device, if you know there's different costs, there's different intensities, often you get what you pay for.

Often the high price tag doesn't mean you're getting what you pay for. That's why I always highly recommend someone to reach out and work with someone like you.

Because if I have a question, I'm calling you. I can do some research, but it's not my it's not like, you know, the thing I do day in and day out is research.

MF And I just think the point about understanding what's alive and what's part, you know, on its way out or on its way back in, depending upon how we support it in the body you need a team who's actually studied that to know to really know that.

And so I just think it just a great highlight of why people should be, you reaching out and asking for the support. So because, you know, I have a couple of PMF devices, they're purchased for different reasons, especially like the one that I can travel with, you know.

But man, you can waste a ton of time and money. So if someone's looking, you know, I appreciate so much you sharing all this information. Sounds like we go on all night about this.

But most importantly, if someone wants to get that support with with PMF therapy, what maybe is the best for their condition, what is maybe the best for their financial situation?

And maybe they need even more than that? I don't know. I mean, where can they find out about the work that you're doing so that they can get the actual right support?

Talk about confusion. So my website is totally loaded with information and it's overwhelming. It doesn't give you a specific recommendation for a specific problem.

Maybe not the variations of Lyme disease so we can talk about Lyme disease, but then we have to talk about your particular aspects of your Lyme disease.

Not to mention. Yeah, not to mention you. Because it is you brought yourself into Lyme disease, right? Yeah. Like you were alive and then you got Lyme disease, but.

You were alive and you had all these other things going on as well. Right? Right now you have Lyme disease later on, something else. So I recommend getting my book, Supercharge Your Health.

Supercharge Your Health happy about therapy. So that's a $29 investment. If you're going to spend $5,000 or $10,000 for a PMF device or even $2,000 for a pivot device, $29 is well worth it.

And that goes through a lot of protocols. It gives you a lot of ideas. Now, it's still not necessarily enough for you. It's not, how do I do this today? How do I do it tomorrow?

How to do it? Do it the day today. So for that purpose, we have we offer consultations. So on Dr. on my website, drpawluk.com, you go to the homepage and then on the right side of the whole page, you'll see consultation, request a consultation.

You click on that and it'll give you a form to fill out, fill out the form and then apply apply for a consultation. Now if you're looking to not have to do any work, if you're looking to just give a magic bullet, a pill, and that's it, you want to be done.

PBF therapy is not for you because you have to use it. You have to apply it, you have to work at it just like you do anything else that to have adequate results.

And beyond that, those the combination of those two things. Now the website again has a lot more blogs on individual topics and it gives you some basic information on how chemotherapy can help that particular condition.

But it's still not the answer, the solution for you. So the consultations, there are two things we get to know you and what you're trying to aim, what you're aiming to do, but we want you to be prepared.

Don't waste a precious half hour of a free consultation if you don't prepare yourself. So we recommend certain things that should be watched or read before you even come to the consultation.

And having the book would be a big help. Not necessary, but it would be a big help. Then with the consultation, once we get to know you, then we say, okay, here's your conditions, here's what you can expect, and here's the device is probably going to get you the best answer.

Now, if you're expecting to solve your problem for a $50 device, Lyme disease is not a $50 solution, right? Right. It's a lifetime commitment. Well, and I think that one of the things I really like about the PMF devices is they are kind of lifetime purchases as well.

And, you know, that's the thing. You take care of them. And I one of my goals, Bill, has always been not to be the doctor who treats chronic illness, but the person that helps people be chronically well, you know, so that they can go out and shine their light, so that they can go do whatever it is they're passionate about.

And the thing I love about PMF is wherever you're at it, it can support you getting to the next level. And then once you're there, you can it to help maintain yourself like you were saying along the way.

And that's one of the most important parts. And I think about like your blog to me is inspirational. And if I need to find like and for me somebody to ask me a question and do I refer them to you or do they either want to go down PMF right now?

Finding the Right PMF Guidance and Devices

Maybe it's for a condition for a friend that I don't might not be the expert. That's where I can go get a quick look. But I also have, you know, decades of experience and being trained in how to read research so I can take your you know, and I also know you say I know the quality, but the blog to me is like a quick informational piece and it's a place of inspiration and it allows me to know the possibility.

And then your book is kind of like the DIY version or just getting to know it a little bit more. But I think the consultation part is where which separates you from so many other people.

And that's really like what I love about my job is being able to dove in with that individual and find out what their goals are so that you can match their goals and their lifestyle with the proper device.

Because as you said, it's something you need to use on a regular basis if you want to get the results. And you know, to me, the other part about PMF, I'd be remiss if I didn't say it's friggin easy.

I mean, a lot of time really put it like I walk around, you can put in your pocket, you can lay on it, whatever, depending upon your device. And yes, you have to commit to the time.

But if you're going to do this, you're so worth it, right? I mean, the people we're working with deserve health and to optimize it. And to me, it's just one of the one of this hidden secrets.

And I think that it's also a place that other people recognize are hidden secrets. And there's a lot of baloney out there. And I'll I feel free to say that because I've talked to a lot of people about it.

So I would just say to everyone, if. I want to address in fact, that's a really critical point. There are lots of multilevel marketing companies out there that are selling PMF devices, a lot of pressure and they sell you a great story.

But they're not doctors, salespeople, and they're totally trained on that machine, so they don't know much else. So because I'd mentioned intensity is really, really important.

Intensity matters, if they don't tell you, if they cannot tell you what the intensity of their machine is, why would you buy it? Why would you buy a car when you don't even know if it has an engine or what the horsepower is?

Right. I mean, you got to know what you're buying and they won't tell you because they don't want to talk about that because that's not important to them.

What's important to them is frequency. And it's been around 25 years and it improves circulation. But what else does it do? Does it get deep into the body?

Right. It doesn't get into the body, especially if you have Lyme disease. Forget about it. Well, and I'm glad you say it that way, because there's my mom actually, I know one of the devices I'm assuming you're talking about and my mom's, you know, retirement community a couple of years back, everybody's getting it.

It's curing everything, including their wallet and their savings. It's like guys like there's nothing wrong with multilevel marketing done. Well, I have personally not seen a multilevel marketing PMF device.

That's work that I would personally purchase or use in my family. And if you need me to say anything else after that, you probably aren't paying attention.

So the key the key is most of these devices are less than one gauss. I have a device that I introduced in the market to compete with these other machines that are only one gauss or less, and they're $5,000 or $6,000.

So we created a machine called the bio balance, which is ten gauss. So it's ten times stronger than those other machines and it's 30 $500 still no, still not cheap, but they're $6,000 for one gauss.

And this is at least ten times more than that. It's still not it's still not good enough. Most of the time. It's not adequate for health maintenance. Okay. But not not for not for hearing.

Right. And and I think that that's the point about getting a consultation is if you're going to invest in something like this, just invest in the right stuff.

I mean, all of us have bought things that we don't really use or we liked it in the store and we do it for a little while. But it sounded good or sounded good.

Yes, it sounded great. Right. But, you know, like you said, there's professional sales and marketing. And then you have people like us, like people can say whatever they want about what I charge and what I do.

But I'm going to sit down and have an honest to God conversation just like this, where it's it's no holds barred. We're just going to be on point and we're focused on helping you achieve, your health goals, not help not helping us achieve our sales goals.

That's we don't there's plenty of people that we need to serve. And like my point here is not to belabor this point, but there are so many damn gadgets that people are buying and wasting their damn money on.

And I just want you to stop wasting your money and invest it in things that are actually going to move the needle forward for you. This is the reason that we've done this summit.

We're not partnering with people. We're not bringing on speakers who are full of crap. These are all people who are vetted things that you know that we know that we're using.

Because in my lifetime, I've had to treat myself. I lost. Well, I try not to say loss because I learned a lot during those 13 years, but I got a little sidetracked for 13 years, you know, and everybody knows I'm always trying to have a

positive mindset, but man, it sucks.

Yeah, you can even see I kind of get a little choked up saying it. But then my daughter was six. She got bit by a chicken and had a cube. The BCA was sick for three weeks while I let everybody else try to do it because you're not supposed a doctor and kid.

Then I just had to take over and do it. But she was fixed in a couple of days with the acute issue. I treated her for another six months like straight up antibiotics and herbs, then herbs for another six months.

And she's on EMF and all the a lot of the other therapies that we've talked about on a regular basis, because she's my kid and she means that much. So the reason I wanted to sit down with Dr.

Pawluk today and bring this conversation to you is this is an area where you can get amazing benefit, but you can also go to the cleaners and I'm sick and tired of everybody who's out there.

Charlotte's enticing this field. Too many people are suffering. Too many people are getting the wrong information. And slick sale stuff has no place here.

I can tell you the truth. And you can buy or not buy it doesn't matter. But like, let's really tell the truth. So, Bill, I just want to say thank you from the bottom of my heart for showing up and talking about the research, sharing the truth, and diving into these devices like no one I've ever met.

I mean, I've met all these conferences. I checked I go down every rabbit hole with every stinking device, because if I don't, my patients, they're going to ask.

I've never seen anyone who's put so much time and so much care into putting together what, you know, PMF can be and should be. And I just want to say thanks as patient as well as a practitioner and a father.

Thank you for that as well. We both share the same heart. I tell people that I'm not your doctor, you're your doctor. I'm your consultant. You have to doctor yourself.

I can make recommendations to you, but if you don't follow them, then you know doctor thyself. There you go. Well, everyone, I want to say thank you for joining us for this episode of The Healing from Wine Summit.

I'm sure you can tell how fired up I get about this and why I brought Dr. Bill Pawluk on here, because he's the same way we, you know, just so into making sure that you get the right information in this incredibly important field.

And it's an area of healing that, like you said earlier, it can activate, you know, can really activate your self-healing mechanism when done well. So definitely check out drpawluk.com as always.

We'll make sure we have everything in the on the summit resource page point and click and then you can go over and talk to Bill or somebody on his team, definitely pick up his book.

Dr. Pawluk, thanks for joining us. This has been such an amazing pleasure. Dr. Moorcroft. My pleasure. And may we do it again? Absolutely. And everyone, thank you for joining us for this episode of The Healing from Lyme Disease Summit.

Again, we're here to help you learn more about the options that are out there and then connect you maybe with some of the people who can help you figure out what the next best step for you is and give your ideas to your practitioner in your area.

So even if you know you've got a great practitioner in your area, maybe they don't know as much about, you know, PMF, definitely have them reach out to Dr.

Pawluk as well, because I learned so much from talking with them. And we're really here to share information

because there's too many people suffering.

And at this point, you know, we know there's several million people with post-treatment Lyme, chronic Lyme disease. And so we need to get more practitioners in our mentorship program being trained by the likes of Dr.

Pawluk having his book on their shelves. So thank you very much for being here, and we'll see you in our next episode.