Introduction to PEMF and Magnetic Therapy

TMS was developed originally to replace ECT, Electroconvulsive Therapy. Yeah. You don't need anesthesia and it has a lot of the same benefits. It may not be quite as powerful as E. C. T., but then it's not as barbaric either.

Right. So basically what you're doing then is you are stimulating the brain with this magnetic field. And now you can find you treat Parkinson's, you could treat MS, let's say ALS, You can treat brain injuries.

He actually did a review paper, published a paper in the Journal of Science and Medicine on the use of TMS, well, not Tms, that kind of tms but with other magnetic field therapy devices for TBI, for brain injuries.

And there's a pretty substantial literature showing a tremendous benefit of magnetic fuel therapy for our brain. So if it's doing it for a brain injury, what's it doing for other problems like ams and like Parkinson's?

Sure, sure, absolutely. Welcome to the PEMF Effect, where breakthrough science helps take control of your health. I'm Dr. William Pollack, and I am here to guide you in tapping into the power of PMS therapy for recovery, vitality and total body wellness.

From overcoming chronic pain, optimizing brain health, boosting energy and aging with strength, this podcast is your path to cutting edge solutions for lifelong well-being.

If you're ready to move beyond symptom management and tap into your body's natural healing ability, you are in the right place. Let's dive in. Today's episode is a previously recorded session from a summit where I was a guest speaker.

Welcome, Dr. Follick. I am so glad you were here. And I'm going to ask you to introduce yourself, explain why you've become such an expert in post electromagnetic fields.

Phil, take it away. Thank you very much. Should I call you Terry or Dr. Walz? Terry is fine. So thank you, Terry. So my background is founding medicine.

So I did founding in medicine for many years, and I was a medical director for founding a medicine group in New Jersey. We had 14 family physicians, the biggest founding of medicine in the whole East Coast.

And so we shared patients a lot. Over a period of a week or two weeks, we actually had two admissions for GI bleeding. One person almost died, so gastric bleeding, The commonality for them was ibuprofen.

And so I kept, I said to myself, this is stupid medicine. This is like the definition of insanity, doing the same thing over and over again, not expecting any bad things to happen.

Never mind good things, but bad thing to happened. So anyways, so said I decided to study acupuncture, to find another solution for pain management that was not going to harm people or hurt people.

During my studies with acupuncture in 1990, people didn't know what acu puncture was yet in this country. And so I had to find a different way of doing acupuncture-like treatments without using needles.

So then I discovered that in the Orient they were using a lot of magnets on acupunture points.

From Acupuncture to Magnetic Field Research

And, so, I started using magnets and discovered the magnets were doing a bunch of other things in addition to acu-

puncture. They would improve healing of wounds, they would decrease inflammation in local tissues, which are things that you don't normally see with needles, acuplcture needles And the more I worked with magnetics of all kinds, back braces, shoe inserts, magnetic necklaces, bracelets, pads on the body, uh pads, on a bed, etc.

The more i discovered that again magnetic fields did a lot more than just acupuncture. And so essentially I moved away from acupuncture and just looked at magnetic field therapies and began using them more extensively.

Eventually, as I was trying to understand the literature, most of that literature was buried in Eastern Europe, was burried in German, Russian, Ukrainian, Polish, not English, or you had this little abstract snippet, if you go to PubMed.

little snippets. So along the way I met a doctor, an MD-PhD from the Czech Republic, Dr. Derebik, who had translated a lot of that literature on magnetic field therapies for his PhD in rehabilitation, using PMS for rehab, and he had his manuscript.

It was pretty rough, So he gave me the manuscript. We put it together and basically published a book called Magnetic Therapy in Eastern Europe, a review of 30 years of research.

So that book, I don't recommend it for the average person. The clinicians might like it just to see what the history is, but it's really too technical.

It's highly summarized. There's a lot of abbreviations. But that convinced me that this technology had a really sound physiologic basis. It was good clinically, but there was also really good understanding some of the mechanisms behind PMFs and what they did in the body.

So I started working with magnetic systems from Europe, purchased whole body magnetic system, used them for quite a while. And after about 30 years total of working magnetic fields now, I published two books.

One is called Power Tools for Health. Power tools for health was, again, to provide more science for people about the use of magnetic field. So I discovered over the years of reviewing the literature that there are about 25, 27 different actions of magnetic fields in the body, physiologic responses of the bodies to magnetic field stimulation.

And they form the basis behind what magnetic therapy does. Now we're used to thinking in terms of a disease or maybe even a symptom and you have a treatment.

Each disease, each symptom has its own specific unique treatment, which is not true. Magnetic field therapy has about 27 actions and probably even more.

And they're all unique by themselves. So it doesn't matter what the disease is. All these actions happen in physiology, whether you're a dog or an elephant or a human.

But also I reviewed about 50 different health conditions and presented the science. the studies that have been done for those different health conditions.

And one of those health condition, in fact, that's in my Power Tools for Health book is MS, multiple sclerosis. There are numerous studies with the use of PEMFs with MS.

Yeah, we should stop. Let's define P-E-M-F. Not everyone listening will know what that is. All right. Perfect. Thank you. So P. E. M. F stands for pulsed electromagnetic fields.

At the elephant in the room, is EMFs. So everybody talks about EMs, 5G, the microwaves, cell phones, Wi-Fi, all of that. Those are categorized as EMS.

I call those environmental magnetic fields. Yeah, big difference. Right? Yes. They're electromagnetic fields, but they're environmental. So there are two basic kinds of magnetic fields then.

Well, that's three. One is the static magnets that I started working with and stopped using because they are very limited in what they can do. And then there the PEMFs, which actually were discovered and used way before EMF became an issue.

So the difference is that EMS are broadcast into the environment. They have wavelengths, whether it's microwaves, um tv waves whether it's radar you name it those that have wavelengths and so they go on forever so i call those open loop pulsed electromagnetic fields are created uniquely by current flowing through a wire and this is what we call the right hand rule The current is my thumb, the wire is in my thump, and the magnetic field is developed in a current flowing through a wire perpendicular to the flow of the current.

But as the, as a, current pulses, you know, like with the power line current to like 50, 50 cycles per second or 60 cycles, per. Second, it is pulsing at this rate.

How PEMF Works in the Body

So it's going up and out and coming back. It's collapsing on itself. Every time the. Current flows or pulses. The magnetic. Field pulses out. And comes back down again.

So PEMFs are designed for health use. Yes. They're not designed For communication. And the risk of EMF is because they are wavelengths, particularly the bad EMS, if you will, the wavelengths are extremely short.

Because they're short, they get absorbed by the body. So that's the purpose of a microwave oven. It's extremely magnetic fields, electromagnetic waves, and as a result they cook.

Yes. So that's a very different use of a PMF. And we use radioablation to kill nerves and to burn warts and tissues. Yeah. For destructive purposes. But again, they're destructive.

They're not healing. Their destructive, whereas PMFS are not destructive they are healing for that particular purpose. How does a pmf work then? So Once a magnetic field is produced, it basically goes out and then comes back.

As it goes into my arm and comes out again, pulses in and out. A better visual would be the wind. The wind is blowing through the trees and the only way we know that we have wind, is the leaves are moving.

Yes, yes, they're moving. So the same thing happens with the magnetic field in the body. It's like the wind, it goes into the, body goes completely through and back in again, or back out again.

And as it's pulsing, the it says if the wasn't even there. The body is basically completely invisible to a magnetic feel. Wow. But the magnet, so the Magnetic field ignores the Body doesn't know it there, Yeah, yeah.

The body knows it's there. So as the magnetic field pulses into the body, it goes in through the tissues and back out again, because nothing in the bodies stops the Magnetic Field.

Bone, brain, fat, skin, muscle, doesn't matter. It's completely transparent to the Magnetic field. But as it passes in and out, pulsing in-and-out, what it is doing is it creating charge.

Its creating current. It's creating basically increasing the energy levels in the tissues. So the body reacts to that magnetic field through induction.

So there's an induction of a magnetic filed by the tissue, by body itself. The magnetic fields doesn't do the charge, the does the charged. Magnetic field interacts with ions.

I'll give you an example. Faraday's law. This is all the principle of Faradae's Law. Michael Faradey in the 1800s discovered that if you take a loop of coil, copper wire, and you put a light bulb in that circuit, and you close that circuit and that pulse of magnetic field into that circle, past the copper wire, the light bulb lights up.

That's called induction. And Ferris said that the higher the induction, higher than magnetic fields, and the faster it reaches its peak, more charge gets produced in whatever, including the body.

So the magnetic filed then is interacting with ionic structures anything with charge in the body. So every molecule in their body has a charge, positive or negative.

Essentially, there are very few that are neutral, but mostly proteins, fats, cell membranes, cells themselves, mitochondrial membrane, etc. All of these are basically charge carriers.

And as a result, the magnetic field is activating all of this. And that's what ends up producing those about 27 different actions in the body. Are you tired of living with chronic pain?

Medication only masks the symptoms, but real healing starts at the cellular level. I'm Dr. William Pollack, the leading expert on PMF therapy. Pulsed electromagnetic field therapy is a science-backed, drug-free solution that helps reduce pain, speed up recovery, and improve overall health.

Right from the comfort of your home, Take advantage of an exclusive 10% discount on DrPawlik.com PEMF Systems. Visit Drpawlk. That's D-R-P-A-W-L-U-K dot com to register and claim your savings.

This limited time offer is available only to registered listeners. Don't miss your chance to experience the benefits. Terms and conditions do apply. Don' just manage pain.

Transform your health. Visit DrPolitik.com today and let's get started on your healing journey together. And of course, everyone listening here, cells, they're very much electrical organs.

Most of our cell membranes work and communication depends on that charge. So this is talking to our self-membranes, talking all of the receptors. And in your experience, apparently it's doing helpful things as opposed to harmful things.

How does this PMEF reduce pain? in your experience, do you have any sense for that? Sure, let's back up a little bit more. Let's go back to the 27 different actions of magnetic fields.

So the question becomes what causes pain as one of the actions that magnetic field. But so PMFs have two actions relative to magnetic feels. One is it has a natural pain killing effect like Tylenol, antinosusceptive it's called.

It's natural painkilling effect. The second thing is the cause of the pain. So if all I do is to treat the paint itself, we're not doing a great job with magnetic field therapy.

You might as well just give somebody a narcotic, right? But that's not our goal. Our goal is not to just reduce the pane. Because if you all you do reduce pain, it comes back if don't take care of cause.

Oh, yeah, absolutely. Right. So the goal then with PMF therapy is to reduce as much as you can the cause behind the pain.

Pain Relief, Inflammation, and Device Strength

And that requires some degree of healing. It may require improving circulation. You can get pain from lack of circulation, the tissues, schemia. All right, you get paid because of inflammation.

Inflammation causes swelling in tissues which then causes distortions of nerves and causes decreases in the ability of the nerves to conduct. Or the nerve becomes hyper irritated, hyper excitable.

It can also cause a decreased production of ATP, decreased reduction in function of mitochondria. So all of these are different components of the actions of an injury to a tissue that then results in pain as one of that byproducts of pathologic process or pathophysiologic processes.

That process can cause pain. So then the goal then would be to try to remove that. So one of the key functions of PMF therapy is to improve circulation.

Another key function of PMS therapy, is decrease edema. another is, to decrease inflammation. And most of time, this is the one that I rely on the most.

Yes. Schemia is usually pretty obvious, right? If you put a band around an arm, you're going to cut off the blood supply, You're gonna get pain. heart or whether it's a shoulder or whatever, ischemia is a major contributor to pain.

So that circulation becomes important. But inflammation is the most common cause of chronic pain, right? And so therefore, inflammation, and along the way, if you happen to improve circulation, because again, the magnetic field doesn't decide what the body's going to do with it.

The body decides what it is going So you're presenting this stimulus and then the body says, okay, I can use this energy and what am I going to do with it?

Well, obviously I'm going improve circulation. I've got to have a pain killing effect. And I reduce inflammation, et cetera. So all the different actions of magnetic fields and one of the key actions that magnetic field of course is acupuncture.

One of best uses of acupuncture is pain reduction. Why does acu-puncture reduce pain? It's stimulating endorphins and encephalins. It increases serotonin.

It's starting to stimulate all kinds of neurotransmitters in the brain and the body. It reduces cytokines, it reduces mast cell releases and so on. So all of these are sort of secondary actions of acupuncture.

A magnetic field does all that too. Without the needles, that sounds pretty good. Yeah, you're getting free acupunture at the same time you are doing magnetic therapy for other reasons.

And is this magnetic therapy a local wand that I'm putting over part of the body or how do we deliver that? All right. So the second book called Supercharger Health with PMF Therapy, I go into different types of devices.

If you have local devices or you devices to treat a chest or a belly, or if you had devices that would treat the whole body. You have to kind of pick and choose the machine or the equipment you want for your goals.

Yes. And then you could have very low intensity magnetic field devices, and they are available in the market, which I don't advocate and I'll tell you why in a second.

But you can have variations of intensity going from anywhere from about, let's say, half a Gauss. So Gaus is a measure of magnetic fields, G-A-U-S-s, or GaUS or gauss, so the Earth's magnetic is half of gaus, on average.

That's it, okay. All right? And so you can have machines that are lower than the Earth's magnetic field. But the earth's magnet field is static. So if you pulse a magnetic feel, even though it's lower, into the magnetic fields, they're going to interact and produce a more dynamic response.

And then you increase the intensity going upwards as much as an MRI machine. You could have magnetic feels that 10,000 Gauss, one Tesla, two Tesla. Right?

So you have a huge range of intensities. And that's important because what we found out, research has shown that magnetic field therapy by decreasing inflammation, one of the mechanisms of action to decrease inflammation is to stimulate the adenosine receptor.

And the Adenosin receptor is very important in inflammation both acute inflammation and chronic inflammation. The ideal magnetic fields to reduce inflammation turns out to be 15 Gauss.

So at the adenosine receptor, which sits on the neutrophil, then the magnetic field stimulates that adenosine receptors optimally needing 15 Gauss. So then you have to have a minimum of 15 gauss, but 15 gauze is only going to work superficially, like basically in the skin, because magnetic fields drop off in intensity very rapidly, just like we have with radiation, ionizing radiation.

Right. Magnetic field therapy is a form of radiation but it's not ionising, it is not damaging or harmful. But it still has the same principles like sound and light and heat and cold and so on.

They drop off very rapidly as you move away from the source. So in other words, you have to deliver 15 gauss at the tissue. That means you to calculate, like we do with ionizing radiation, we have the calculate the dose of the magnetic field that you need at target.

Sure, sure. This makes a lot of sense. And so for the brain, for example, MS, You want to stimulate across the skull. And again, the skull's transparent to the magnetic field, goes right on through.

As a result, if you want to deliver 15 ghosts across the whole brain, you're going to need to have about a 4,000 ghost magnetic fields. Wow. Are there devices like that?

Absolutely. I work with those every day. Okay. Sign me up. So yeah, when we get to MS, this is to a specific topic of MS. And magnetic field therapy is amazingly important and helpful in MS.

Because, again, if you use the right magnetic intensity, then you can actually heal the lesions. You can heal plaque. OK. So have you seen this? Tell us more.

Tell about some of these cases. Yes. Well, what you do is you get MRIs. And so MRI show you plaque, MRIs are variably helpful in distinguishing the full dimensions of the lesion, right?

So plaque is in a sense like a volcano. It's called a penumbra. You have the center of volcano where the most damage is and as you move away from the centre, from top tip of a the volcano, as move farther and farther away, there's less and less damage as we move towards the base and further out into the environment.

PEMF for MS and Brain Recovery

Well, the same thing with the plaque. We have a center area of plaque that has the more ischemic reactions or the most inflammatory action or tissue killing action, apoptotic or necrotic.

It can produce necrosis, which basically kills the tissue. So as you move away from it, then you get more and more functional change as opposed to pathologic change.

at the highest density of the plaque, you have dead tissue. And one of any caveats about magnetic field therapy is magnetic-field therapy does not raise the dead.

Dead tissue is dead-tissue. You can make it a prettier-looking scar, but it's still a scar. But as you move away from the debt tissue, You start to have variations in degrees of pathologic and functional change.

So as you move farther and farther away, the magnetic field is going to have the most impact on what can be changed. On the stunned tissue that is struggling.

But it's still alive. It's alive, and if you do the Magnetic Field Therapy, then that tissue has a chance to recover and live out its full life or at least live a reasonable amount of time before it gets replaced apoptotically by the way the brain normally heals.

Correct, correct. problematic tissue. So how many sessions would one need to recover the marginal tissue? All right. This is something that you and I say all the time as clinicians.

When am I going to get better? Yep. I hear that all time. All the times. What's the answer? Well, tens. It depends on many, many things. Many factors.

And the same thing happens with PMF therapy. So again, the more damaged the tissue is, and we know that brain cells don't heal well. It takes a lot of work for a brain cell to recover to its full optimal functioning.

And even if it's not 100% normal, it can still function for quite a while. So you can improve the function. PMF therapy basically works in three sort of phases, if you will.

like with pain killing, the natural nociceptive effect. So you can improve physiologic changes very quickly by improving circulation, by decreasing swelling, increasing neurotransmitter production, and by increasing the ability of the cells to talk to each other.

All that happens very rapidly. That's the physiological phase, basically what the magnetic fields are doing. The second phase is to improve function. So the more physiologic improvement you get, then you begin to see improvements in function.

And that can take a longer time. Function depends not only on improving physiology, but function also depends on healing, recovering the tissue. So what happens then is that the healing component of this is the most important.

PEMF therapy has actually been found to increase the growth or development of neural stem cells. Oh my goodness. That is huge, everyone. Stem cells. Neural stem cells to get a 400% increase in neural stem cell and about 150 growth factors that go with those stem-cells.

That was key. You have the capacity then to heal the brain. So you have a capacity to the damage to an extent that it can be healed. Do these kind of devices exist or is this only a research tool?

I use it all the time. Okay, tell us more. So, again, when you do it with MS, what are the problems with the MS? So we talk about MRI and plaque. You can do MRIs, you can functional MRI, spec scanning, and so on.

Different functional tests of the brain. The classic MRI doesn't tell you function. It gives you some sense of damage and how much possible residual benefits you're going to get.

We see this with stroke all the time. This with TBI. Magnetic field therapy, by doing all these things, you can improve spasticity, fatigue, walking, motor function, pain, circulation, cognitive function and speech function.

You can, again, improve brain functions, ability to communicate. Correct, correct. I've seen all these things with magnetic field therapy. Your body was designed to heal, but illness, chronic disease, stress, injury and time can slow that process down.

What if you could restore your body's natural ability, to recover, recharge and feel its best? The key to healing is giving your, body the energy to repair itself.

PEMF therapy does exactly that. recharging your cells, improving circulation, reducing inflammation, and helping you function at your best. For decades, I've studied this technology, worked with hundreds of medical professionals, helped thousands of people reduce pain, regain energy, take control of their health.

However, not all PMF devices are created equal. No one size fits all. We offer personalized consultations so you can find the right device for your needs, backed by real science and trusted results.

If you're ready for a real solution, let's talk. Schedule a consultation at drpauluk.com. That's P-R-P-A-W-L-U-K dot com, because real healing starts at the cellular level.

So are these big devices that would be coming to your office? Sorry, I tried to douse my phone, but a message came through, not a call. Okay. So there are degrees.

There are some devices that are about the size of a cell phone. Wow, okay. And there some are devices and it depends on the control units. The control unit can be small.

What you're doing again with the magnetic field is you are passing the current from the controlled unit. You're passing current down a wire into a coil.

yes can be a size of a quarter or they could be the size a whole body yeah yeah right so you and you can get systems that will give you that range of choices in the same system you could have local treatment for like an elbow a shoulder or a back of the neck fact i use a pmf device every night for sleep at three hertz at delta yes delta frequency and i used it all night long in my pillow to help me with sleep And it's small.

It's a portable battery operator, like a little small cigarette box. Wow. And the coil itself is about that big. Yeah. Very small, about two inches to three inches.

So you can go from that all the way up to devices that are like TMS. Oh, yeah. Explain T. M. S. for people who may not know. All right. Tms stands for Transgranular Magnetic Stimulation.

which means the magnetic field is going through the brain, going across the skull into the brains. The TMS machines have a coil system that's like this, they're big, and you put them on the, on this on, the Brain for treating depression.

That's what they were approved for by the FDA, treatment resistant depression, but there's a lot more application than the FD indication. Yeah, absolutely.

And what do they do with Tms for depression is that they are powerful enough to stimulate or generate current in the So they put the coils over the motor cortex, over a part of the brain that controls muscle movement, and they increase the intensity of magnetic field in that spot until they get a hand movement.

Device Options, Protocols, and Clinical Support

So it's not a convulsion, but it is basically like a twitch, right? So that's called the Motor Threshold. And then they will take that threshold and then put that applicator on the front of their head.

They'll go up to 120%. They go 20% more than the Motored Threshhold. to stimulate charge production in the brain. TMS was developed originally to replace ECT, electroconvulsive therapy.

It's much safer, you don't need anesthesia, and it has a lot of the same benefits. it may not be quite as powerful as Ect, but then it's not as barbaric either.

So basically what you're doing then is you are stimulating the Brain with this magnetic field and now you can treat Parkinson's, let's say ALS, you can treat brain injuries.

I actually did a review paper, published a paper in the Journal of Science and Medicine on the use of TMS, well not Tms, that kind of tms but with other magnetic field therapy devices for TBI, for brain injury.

And there's a pretty substantial literature showing a tremendous benefit of magnetic fuel therapy for our brain So if it's doing it for brain injury, what's it doing for other problems like MS and like Parkinson's?

Sure, sure, absolutely. So are you using these small portable devices then for MS? Okay, so let's talk about what I would do for Ms. Yeah. Part of the problem is what is your MS, What are your experiencing with your Ms?

If you have somebody who's in a wheelchair already and is incontinent, fecally or with bladder incontinence. Well, you've got to add a more severe level of damage, right, with their MS.

But if you have somebody just got some plaque and maybe had some optic neuritis, You don't need something

quite as big or as strong. So you can use that small little device to help to top with sleep, but it's not strong enough because it is 200 gauss.

200 Gauss will deliver to 15 gaus only in about half an inch. That can be very far, yeah. Very well. But for inflammation management, it's not going to be ideal.

So most of the time, I want to using devices that are more powerful. You need to have a machine that's going have probably a minimum of 4,000 Gauss to able to treat transcranially.

And that is the goal, you have to treated transcraneally. Yeah. Then you got your MRIs and you know where the lesions are. You can know in terms of symptoms where some of the problems are as well, but MRI is going to guide you where your lesions are.

Whether you have it in the neck or you had it at the thoracic spine, most of them are going be in brain or in neck cervical spine. Rarely you don't see very often thoraxic spines, they do happen too.

Yeah, absolutely. What you can use for treating the brain, you could use to treat the spine and if you get the right magnetic system, You could actually run two channels at a time where you treat both.

simultaneously. And then that decreases treatment time. Again, you have two applicators that are running at the same time, at same level of intensity, would get the best results the fastest.

So in other words, the total treatment that's needed for that would be a lot less. Wow. Are these commercially available in the United States? In both of my books, Power Tools for Health and Supercharger Health, and on my website drpauluk.com.

Drpaulk. I have a product comparison guide for all the different devices that I've worked with and I recommend and use. And then there's a store, so people can go to the product, comparison, guide or the store on the website or in the books.

Again, there are charts of the So if someone got a device, do they have to work with their treating physician to set these protocols up? Well, what do you think?

I'm thinking that people can probably set up the devices with a bit of help. That's what I do. Yeah. The biggest problem for most people is they end up buying machines or equipment based on some salesperson selling them something.

And the sales person doesn't even know what they got. The salespeople don't know the intensity of their machines. I mentioned that you need a minimum of 15 gauss.

If you're going to treat transcranially, you'll need at least 4,000 gaus. You need to get the right piece of equipment. Then if you do that, then Supercharge Your Health has protocols, has general recommendations for how you use the magnetic fields, and has some supplement recommendations.

Anybody who works with DrPollack.com We provide free consultations. Okay. We'll tell you what device would be best for you. Will tell ya how to use it.

And then we provide you with ongoing support for for, for You to be able to get the most value out of your equipment. That sounds really quite remarkable.

Now, Bill, in addition to MS, because this summit is for people with neuroimmune conditions, I imagine we're going to have people with Sjogren's, with RA, and with Bechet's neuro-saccharidosis.

So a wide variety of autoimmune diseases that have attacked either their peripheral nerves or their perineal nerves, or the brain.

Neuropathy, Nerve Healing, and Closing Remarks

What do you think? Would those people be helped as well? All of them. All the common factors. Yes. And then, you know, I'm thinking like the diabetic neuropathy.

Piece of cake. Okay. So. But diabetic neuropathic is better actually than idiopathic neuropathy, where you don't know what the cause is. Well, the reason is that you do not know the causes.

then, you know, basically the symptoms. So with diabetic neuropathy, one of the most important things that PMFs do for that is they improve circulation to those nerves.

Yeah, yeah. Oh, absolutely. And in those tissues, so diabetic neuropathy responds really well. I have a picture of a relative, actually, who had Charcot foot from diabetic neuropathies.

He was a type 2 diabetic, had it for a very long time, poor control, he started developing a Charcot foot, which means the bones are basically crumbling because the balls don't have adequate vascular supply due to this tiny little blood vessels that feed the bone.

So his bones started sort of falling apart. He was under standardized, standard wound care for about two years. Neuropathy was not getting better. The wound was bad, it was oozing from the foot to bottom of the foots, he was seeing podiatry, seeing all kinds of wound-care people.

We got him on a portable battery-operating magnetic system. Within one month, his foot went from this to this. Wow. Now, here's another problem that I see people struggle with.

A small chronic idiopathic demyelinating CDP, chronic, idiopathy demyalinating polyneuropathy. Have you had any of those folks? Yes, we've had a few of those.

I did consultations on a fewer slides. Don't have a huge series. And they do better too. The challenge that we have with nerves, again, nerves don't heal well.

Yes. Right. They take a long time to heal and people have to have the patience to continue their magnetic field therapy. to let the nerves heal. But you can improve circulation, you could reduce pain, improve sleep.

So a lot of functional improvements you get with these individuals that don't directly cause the nerve to be normal tomorrow. Correct. You know, if a nerve is regrowing from the brain all the way down to the toe, I believe I was recalling something like seven years to make that path.

I presume that this would facilitate a little faster recovery time. Would that be correct? Yes. Because one of the things that magnetic fields do is they increase BDNF.

Yes, yes. And other nerve growth factors. So that you and studies have been done in rats where they did sciatic nerve, the cut through transected sciatica nerves.

that did magnetic stimulation and then followed those nerves with you know after after with magnetic field stimulation, and found that they started getting sprouted.

Okay, excellent. Excellent. Right, so we know we can't recover. The problem is getting them to reconnect properly. And does this have any assistance there?

Well, it takes too long. So the problem with a lot of this research, the animals don't live long enough, So what happens is that you'll often see people with numbness, and you know, if you're numb, that the nerves are basically dead or pretty well dead.

When they start having paresthesias, they started having numb and tingling. They started going from numb to ting.

That's a good sign, but it's good. So that means those nerves have recovered.

So there's a chance then over a period of months, typically months to even a couple of years, with the regeneration processes of the nerves, that you can get some reasonable recovery of nerves.

A hundred percent? Well, I tell people I'm an MD, not a G. O. D. And even G-O-D doesn't give you everything you want. You have a good relationship with GOD.

Yeah. It was absolutely helpful. Well. Bill, this has been really very, very informative. I appreciate your taking the time to chat with us. Tell us again how people get to your website.

OK, so it's drpawluk.com. And everyone listening, Dr. Pollock is going to have a gift for you. Be sure and download that. You'll get some great, great info.

And Bill, thank you so much. I've used PMF for many years and yes, that certainly has been a very helpful tool. Now, much love to you and your family and I look forward to seeing you hopefully at another A4M conference.

And I wish you very great success with your summit. Thanks, Bill. Thanks for joining me on the PEMF Effect. I hope today's conversation gave you new tools, insights and inspiration to take control of your health.

If you enjoyed this episode, don't forget to subscribe, leave a review and share it with someone who could benefit from PemF therapy and holistic healing.

Your body has the power to repair, recover and thrive. Sometimes it just needs the right charge. Until next time, stay curious, be proactive and keep powering up to better health!

you