Introduction to Infuserve and Lyme Compounding

Hello, everyone. My name is Dr. Richard Horowitz, and I am co-host of the Healing From Lyme Summit. And it's my great pleasure to introduce to you, Randy Breton and Randy has been a good friend and a compounding pharmacies that we have used at the Hudson Valley Healing Arts Center for, I don't know, Randy. It might be 20 or 30 years at this point.

We've been together for. It's a long time. It's a lot. It's a long time. Yeah. it's been a great a great partnership, I guess is the best way to put that.

Yeah. So, so we're going to talk today about compounding solutions for chronic Lyme disease and co-infections. and I just want to give you a brief intro on Randy.

And then Randy you can take it away and tell people a little bit about yourself. But Mr. Breton has a rich background in all aspects of pharmacy consulting practice, microbiology, nationwide logistics, pharmacy, law and management.

And his career has included many aspect of pharmacy practice retail, hospitals, sterile compounding, non-sterile compounding, and an integral part of the design and construction, for pharmacy and microbiology laboratories.

So, Randy, it's great to have you here today with us. And and thank you. Tell people a little bit about yourself and kind of how you started getting into Lyme and tick borne disorders.

Well. Oh, well, thank you for the fabulous introduction. I really appreciate that. It's the great part about, getting to be this old is having the experience to apply this kind of, this kind of thing to, and, to help patients and other other, you know, and, and, and practitioners do their thing.

So, we got into this, all, I mean, 25, 30 years ago, we realized that there was a lot of patients out there that, because of the Lyme diagnosis, didn't, have a lot of insurance.

Okay. So and in this was a, this was a big problem. They needed treatment. And what we did was, we we we kind of got rid of the, there was no insurance to begin with, so we kind of went to a cash model, but we what we did was we tried to make it affordable as much as we could, you know, still keep the lights on, but still make it so that patients could get therapy.

And, that's been kind of our mantra from the beginning. And, you know, don't, don't just take my word for it. Get out there and ask some people. We have a very good reputation within the Lyme community for this type of thing.

I encourage you to call us if you have other, other issues or problems, because sometimes, we know the answers or sometimes we know people that do know the answers. So.

Yeah. No. And in fact, for people listening, Randy and I have known each other. I've been using Infuserve compounding in Florida. Now, as I said, for a couple of decades.

And and you're right, Randy. I mean, you guys are one of the least expensive, probably compounders I know of. And a lot of times and people should know this when their insurance companies do not approve certain drugs.

I won't go through all of them, because everything from that is oxide or linea to whatever it is, and they get some ridiculous price like, oh, it's $1,000, I'll go to you.

And it might be a 10th of the cost, right, of what it is. And people get what they need. So you've been actually

indispensable in our practice to get people, some of the products we need.

Yeah. No, thank you for that. That, that, like you said, it also applies to some of the commercial products. Okay. Because, if you go to get a cash price at, Walgreens or CVS or something like that, that cash price is often very high.

their, their algorithms are kind of built differently than ours. So now it doesn't always work out that way, but it's worth the phone call at least, because, we we do our best to help people out that, don't have a lot of cash to to do these type of things.

We want people to get treatment. We want this to happen. And by the way, in the phone number, we'll get into this later. But, 1800 8869 222. Is that the best one to get in touch with you?

That is our that is our one eight has been our 1800 number for, for 20 years. So yes, by. And by the way, the fact that I've memorized it and know it by heart and don't even have to look just tells you how often we need to call your your compounding pharmacy.

It a. Yeah. The the thing is, is that. Yeah, we have been doing it for quite some time. we're dedicated to it. the, the ethos around here is very lime centric.

We do things that other compounding pharmacies don't do. We make a lot of phone calls because people have brain fog. They forget they do other things.

We remind them on, you know, on for refills. We remind them that things are being shipped. And, you know, again, we understand the problem very well. And sometimes that, that helps.

And we we're in very close communication with our patients. It's not just, you know, calling in for a refill. We we want to talk to you. We want to see how you're doing.

We want to know what's going on. you know, we we we have a lot to add to that conversation because we've been doing it for quite some time. So. No, I mean, I and I know because again, we've worked with you guys for a long time, there really is a compassion and a caring, which I don't I don't think most people get from pharmacists to states.

I think you guys are a little bit kind of you're a little bit like us. You're a little bit of the dinosaur in the age of where I'm a solo practitioner out there, you know, helping people, you're kind of the same thing a little bit.

You're you're in there in, you know, in the trenches getting people better, calling them, making sure you're following up, making sure they're getting what they need.

I mean, it's it's really it's a great service. Yeah. I, I spend a lot of my time on the phone speaking with not only practitioners, but patients and a lot of sometimes those folks.

I mean, you can ask, some of the patients, some of those phone calls go for 40, 50 minutes. It just depends on on what I can do to help them. And, and part of that is just education to, you know, because there's, there's, you know, a, a lack of education for certain things.

And since we've been doing it for so long, I feel that we need to pass that information on because it's it's hard it's hard out there to do this kind of thing.

Right. It's difficult though. So, Randy, why don't you tell people? I mean, there's a lot of things about compounding we need to discuss today. Like, one of the things I want to really go into with you is some of the most frequent questions you got about, like, why should I consider compounding a medication?

Now, for me, there are only certain medications you can get compounded, but what are the most frequent

questions you get about compounding and and and and you know and we'll talk about this I think we need to be, you know, very transparent.

Quality Control and Sterile Compounding Safety

There were issues with Compounders a couple of years ago because of one of the compounding pharmacies, not yours, that got into trouble because there was a fungal problem, right in some of their I. V.

solutions. That became a really big problem for Compounders. So tell everybody, like how you got around these, what kind of questions do you get? Well, speaking directly to the the problem that happened at this point 7 or 8 years ago, that was, NECC and those were those were sterile compounds and, I know a fair amount about that particular situation because I was asked to consult for, for that particular incident, believe it or not.

So, the thing was, is that there were there were a lot of breakdowns in that particular pharmacy relative to quality control and, what I can tell you is, is that our quality control is very robust, to use a word, at this juncture, we took what happened in that incident, and we applied it to everything else that we do.

the other thing that we applied was, is that we, we do a fair number of actual drug studies, you know, FDA sponsored kind of drug studies, and we've tannen's even some of that experience and applied it to some of the logistics and shipping that we do relative to keeping the temperatures of drugs consistent when they're shipped.

Because we're, we're licensed in all 50 states. So we ship everywhere. And that's an important concept. some, some, compounding pharmacies don't have that much of a reach.

So it's not as much of a concern for them. no. All 50 states is is important. And and for me, I think one of the first things I started using you guys for years ago in Infuserve was when we were doing glutathione, right?

I was getting my IV glutathione right. You were one of the first sources. yes. It's so important to know about the safety, because if you're preparing glutathione on both for my office, right.

Or for people that might be doing it at home during Dapsone, you've got to be sure that there is no impurities, that it is pure, that the exact amount is what it is.

Right? Yeah, yeah. A lot of that comes to, to fruition at the end where it gets shipped to you guys. But there's a lot that goes on before that occurs.

Obviously. And some of that has to do with where you're getting the raw materials from, which is really important. as a sidebar, that's going to be important when we talk about methylene blue, which we should talk about in a, in a moment here.

the other parts of this are the fact that, early on, we made a lot of, we did a lot of things that other pharmacies didn't do. We actually created a, microbiology lab.

downstairs. It's a separate entity. It's called four Metric Laboratories. And what this enabled us to do was to test everything that was, a sterile product.

practically instantaneously. you know, back in the day, there were, a whole bunch of different things that you had to do for compendium testing where things came as, you know, plates that you put things on to see if things would grow.

we were the first ones to pioneer phosphor luminescent technology. And this, this laboratory does this now. And what it does is it allows, instead of being able to get an answer in 14 or 18 days, it gives us gives us an answer within four days.

So that helps us, you know, manage how, the batches of sterile products are done. And again, it speaks to our

quality control. We were we were the first adopters of of that kind of got that kind of thing.

So, it really that's part of what should be important for you to ask someone, or a compounding pharmacy, you know, hey, what do you do to ensure that my product is is sterile?

That's those are questions you should ask other pharmacies if you're considering a compounding pharmacy for for things like this one. Yeah. No, it's it's a good point.

And, and since you brought it up, so let's talk about some of the major products that, we wanted from you. All that. Sure. The, the list we'll talk about maybe the top 5 or 6 like LDN, low dose now Trek zone, the peppermint oil, the methylene blue, of course, that we get from you that I could not be able to do daptone.

Right. Otherwise, really. I would. But but otherwise we get compounded pain creams, right? Hormone preparations, ketones often from mast cell. And I know some of my chemically sensitive patients.

You're compounding their medications like the DApps on the Doxy. Rifampin. zero. Whatever. They can't even take regular drugs. They have to get a compounded with carob flour or coconut flour.

So let's go down one by one and talk a little bit about these products, because these are essential for me and my lime practice. of. Course, of course.

When do we start with methylene blue since you brought it up. But it's one of the most important ones we use. Yeah. Methylene blue is a it was a really interesting one.

I mean, everyone needs to know, that I received a call from, from doc here about 7 or 8 years ago, and, it was about the daptone protocol. Right. And and the fact that we needed methylene blue to basically handle the a side effect of another drug and, methylene blue is kind of old.

Methylene Blue and Low-Dose Naltrexone

Okay. It was first started, used back in the 1920s to treat malaria. And, because it was so old, there wasn't a whole lot of information on it. So I had to do a lot of kind of scholarship to figure everything out.

And that's where all this, this dosing came from. Now, as far as a compounding pharmacy, the important part about methylene blue is that methylene blue can be used in other things and often is, I mean, it's used to clean fish tanks.

Okay. It's used in a water treatment. It's used in, analytical chemistry and things like that. Now, the important thing to remember is, is that you can go online and you get methylene blue just about anywhere, but it's not for human use.

Okay. A lot that that speaks back to the fact that compounding pharmacies under law have to be very cognizant of where their raw materials come from, and that sometimes increases the price because they're you know, the stuff that you get online is inexpensive for a reason, not the least of which is that the raw material may not be methylene blue.

It could be indigo, something or other. Okay. It, also, it, enables you to understand the raw materials. We get. Your it comes with a certificate of analysis where you can understand what the impurities are, what they aren't, how much is in there, how much isn't.

And, again, that's an important part of, choosing a compounding pharmacy is knowing that, you know, we're on the case where we're chemists. We we understand how all of this stuff goes together.

Now, another important point is, is, is that, the chemistry side, sometimes it makes a difference as to what excipients go into these particular products, not just for people that have, you know, mass or mass cell or things like that.

But there are other components relative to putting these things together that keep them potent over time. So, again, we're taking all of these things into consideration as we move through the process.

also, just something as simple as weighing stuff. I mean, some people try to produce the kind of this stuff with their kitchen scales in, at home. That's not a great idea.

it's no match for my $50,000 for play scale. It's just not. And I'm sorry, but, trust us to do things like that because we've trained long and hard to do so, and it's for it's basically for patient safety.

Right. And that's, part of what we provide, you know. And also it's the flexible dosing. Right. Because when you started making medicine blue for me, we generally get 50 or 50 or 100 milligram capsules.

But I've also had patients that, you know, need lower dosing, very specific dosing. So one of the advantages of compounding is that you can get much lower doses or doses. You can't get from the regular pharmacist. Right?

Absolutely. The dosing is important. And sometimes the, route of administration, I mean, I don't, typically, you know, offer this, but in some patients that have a g-tube or a g-tube, where, in other words, they're not putting it into their mouths.

I have made solutions before. I don't normally recommend that because it stings the inside of your mouth and kind of makes you look like the Crypt Keeper.

Nobody wants to do that. So, you know, different, application organs, are our specialty. we've even made topical, you know, things relative to methylene blue for, things like, breast cancer and things like that.

So there's lots of different ways to use it. It is a remarkable drug. Yeah. Right. So, so the methylene blue is one of the ones we ordered. The other one I would say I mean we've gotten for years and I take it myself I still take low dose naltrexone LDN yeah.

because of the effect on helping to decrease microglial activation in the brain. But, you've also compounded everything from a half to one milligram up to 45 and higher. Right?

So again, you do this very specific right dosing depending on what people's needs are. Right. Oh it's it's very bespoke. It's it's for that particular patient.

And that's that kind of flexibility allows practitioners to make all kinds of very good decisions relative to dosing. And it allows you to taper things up very gently if you want to, which is common, and naltrexone.

The other thing about naltrexone is, is just like the methylene blue, it matters what kind of excipients you put in there relative to the naltrexone. specifically for absorption.

There are there are places that just randomly select excipients to mix with the naltrexone. That's not how we do this. The it's it's very scientific. It's very chemistry based.

And it's important because the doses are small. So you want to make sure that they get absorbed properly. And again that's part of what we, part of what we do.

And, and you also have the ability I mean, you guys have a lot of liposomal formulations for the absorb ability, right? So, you know, regarding that, are you able to make most of these in liposomal some of them one explained a little bit how you decide which ones you're doing in liposomal formulations or which ones you're not.

Well, here's the thing. Yeah. No. liposomal is a is a big a big discussion. you know, liposomes as, as dictated by the FDA are very specific, specifically sized, in other words, that you're taking an aqueous, typically an aqueous drug, and you're surrounding it with fat, essentially a lipid, a lipid layer.

what we tend to do is we, we make either nano or micro emulsions that are essentially liposomal, but we don't call them liposomes. We call them, like I said, like, nano emulsions.

And you can take all kinds of different oils for that. You can use grapeseed, you can use olive oil, you can use almond oil, which is pretty popular. One.

And what you do is we have machines that can mix at a very high g rate, you know, like like like on a jet. It basically puts these things together and creates these.

They're not liposomes, but they're they're a mix of the drug and the oil. And then. We put emulsion that's coming together in. Emulsion. It's a motion.

And you go ahead and you you put that in an acid resistant capsule and you have something that's very absorbable. Now, you don't need to do this for everything.

This is this is in cases where someone may be super sensitive to it and it gives them dyspepsia or you're, you're they have certain things in their elementary tract where you kind of need to slow down the process so they can absorb the drug.

the neat part is, is that we can do this for a lot of different things, and we do do it for a lot of different things to help patients, you know, get the dose and the absorb ability, the bioavailability we call it that they need.

And it's important. Right. You know, that's an important point. So so Randy, if people want to get in touch with you, I'm sure they're going to have questions.

You want to remind them, good email and phone number to get in touch with you in info surf. Oh, great phone number. that has been around for years. Is, (800) 886-9222.

And that is, a very, very common number. it's something that, that, a lot of practitioners remember because we've been doing this a long time. But, the other thing that they could do is they could go ahead and, email me at, it's very simple.

It's Randy at if you serve America A.com. And, if you serve is, it's like infusion and service put together.

Liposomal and Nano-Emulsion Formulations

We've had it for so long, we we've been we don't we didn't want to change it. we did a lot. Still do a fair amount of I. V. stuff. That's the infusion part. So.

Yeah. Randy, if you serve America a.com, you can find it online. It's pretty easy. Great. No. Thank you. So, Yeah. So let's let's dive back in a little bit into again some of these compounded formulations that I've used.

And I know other, other lime doctors have used. can we talk a little bit about compounded pain creams because so many of our patients come in, they come in with neuropathy.

They come in with joint pain. Their stomach just can't tolerate the anti-inflammatories. Talk a little bit about, you know, how you're mixing things like, putting putting things like, you know, ellisville, amitriptyline and gabapentin and, you know, NSAIDs in like one compounded formula to avoid the GI side effects.

Oh, we're, that has been a success story from the beginning. And this is not not new. We've been doing these kinds of pain creams for, I don't know, a decade or more.

the knee part about them is, is that they work. That's the exciting part. And you're absolutely right. The other part is, is that. Yeah, if you have somebody that has GI upset or other difficulties applying this topically, not not only works, but it keeps the side effects down.

Okay. And and it makes it easier to kind of, modify or applications or, you know, scheduling. You can you can move things around a lot easier than just taking it by mouth.

And we get to a use a lot of fairly exotic things. Yeah. Baclofen a gabapentin. Sometimes we use lidocaine. there's all kinds of, of, ketoprofen, all kinds of different things that, really do help those particular areas.

We've even put things together for, certain neuralgia, like certain trigeminal neuralgia, things in the face, things in the neck, very successful stuff.

there is a fair amount of penetration for these particular drugs. Now, the creams that we create are very specific to, as far as the basis go to help the penetration of these drugs.

Sometimes we use things like DMSO. There's other different combinations of, of bases that really help the drugs themselves get through the skin and to where they're supposed to, to where they're supposed to go.

It's a fantastic thing. And we're it's worked very well. Right. So and that's a key point, right. Because DMSO in fact is one of those compounds that allows the absorption, to be better.

So ISO is a great one. Oh yeah. We love that one. It's a great great drug. So so so some because you know neuropathy is such a common one in the Lyme population.

so for example, if they can tolerate like Lyrica, pregabalin or amitriptyline or, you know, I'm, I'm worried about the drowsiness from it even at low doses.

Do you find that if you put in small doses, for example, and mix a little bit of gabapentin, a little bit of amitriptyline, a little bit of pregabalin, you're able to mix these in pain creams where you can keep down the side effects but still get it to the place in the body right where it needs to be by just putting the cream on that area.

Yeah, well, that's the exciting part because it's topical. Yes. You're you're reducing all of these, you know, side effects that you would typically kind of see with oral preparations, but you get all of the good stuff without a lot of the bad.

Contact Information and Pharmacy Support

And, again, like I said, you're able to kind of control application and the application site. You're actually able to put it where it hurts. And this is, this is a good thing.

Yeah. It's very hard by the way. So Randy, if they if you happen to put up this is a good interesting question for me. So if you happen to put a little ellisville in there, amitriptyline and you know I have to watch for interactions with drugs when I'm doing DAP sometimes capital hydroxychloroquine, Citra max and so friend and then to try and if they need it for nausea interacts how much if someone absolutely had to use a pain cream with a little bit of something like amitriptyline in it, is the absorption enough with that that I still would have to pay attention to this, even if it's in very low dose.

No, not and not at all. The, typical amitriptyline kind of percentage in a cream is somewhere around 2%. Okay. And that's, that's about 20mg/g of, of topical cream.

The thing is, is that by the time it gets through the skin, the dose is so small systemically that you're really not going to see those side effects. And that's backed up by us using it in actual people for years.

We know this to be true. This is not a this is nothing, nothing new for us. You know, we know how this affects people. And that applies to some of the all the other things that are in there.

Compounded Pain Creams and Sensitive Patients

you know, gabapentin, immature, baclofen, all kinds of different other drugs. you even get to use some of the insights. You can use Ketoprofen. Okay. And, because the dose is smaller, you don't get as much, stomach effects as you would if you took it orally.

So, yeah, there's a lot of benefit to it. And, again, this this is these are things that we've done. And at this point, thousands of patients. Yeah. Right.

And with these creams, also you, you compound bioidentical hormones. Right. For specifics because I have patients who've gotten them and, and the or even thyroid dosing. Right.

Where they need these kind of very small thyroid dosing where you can put the T3 T4 ratio. Right. Very specific in these. Right. Yeah. Yeah. The the ratio is really, really interesting.

I mean people can people have been using you know, or thyroid and thyroid and things like that or those come from bovine and porcine sources. Okay. And the, the, the ratio of T4 to T3 is not absolutely correct in those, in those formulations because they come from animals.

It's actually their ratio is 1 to 4.3. Well, a ratio in a normal human is supposed to be 1 to 3.3. Well, we can make that happen because the bioidentical T4 T3 that we use is doesn't come from porcine sources or bovine sources.

It's synthetic essentially, and it's bioidentical, which means if I took T4 or T3 out of your body and looked at it chemically, it would look at look exactly the same as the stuff that's in the jar on my shelf.

That's the nature of biochemical. The other part is, is that, yeah, I can make all kinds of different doses. I can make sure that that physiological ratio between 23 is correct.

But we can also do all kinds of other interesting things. And thyroid is is very dose, very tiny in a very tiny amounts, microgram amounts. And so absorption can be a problem sometimes in certain cases we actually make the the capsules sustained release, which means they have a longer period of time to absorb the very small amount of drug.

So oftentimes when we change people over, they, you know, they're very happy. They say, oh, now I feel now I feel better. You know, it's it's a thing.

It's and that's it's a very good thing about compounding. Right. one of the ones I get from you guys all the time, I mean, I'm using it in every daptone patient also, is, peppermint oil.

So why don't you talk a little bit about. Because we had to decide when, you know, I was going through the literature and I was looking up biofilm agents to figure out what was going to be the best ones to use with biocide and cinnamon, clove, oregano oil, stevia.

And I found this one in the literature about peppermint oil helping a lower like the mix of gentamicin. So you didn't have to use it for like Klebsiella.

And that's how this got started. Tell people a little bit about how you decided about the dosage, because you can't just like swallow peppermint oil and you put it in a and, you know, compounding, capsules.

Right, right. A little bit of a file. So how did you come up with the ability to do this? Well, the, the glue to found glutathione is a is a great antioxidant.

So what we were doing was we were using the glutathione in a, in a very chemical way to make sure that the, it didn't oxidize the oxygen, didn't oxidize the oil.

That happens a lot. So that's part of the reason why we we combine those. The other thing was, is, is that, the capsules themselves, we can make them, what they call acid resistant.

So that kind of gets them through the stomach, which is a good thing because, peppermint oil, if, if you've taken it orally just like a teaspoonful or something like that, it kind of burns a little bit.

So the idea is to kind of get it through the stomach into the Dewdney, and the other parts where it can get absorbed, more easily and without all of the other, you know, kind of, you can get dyspepsia if you, if you have too much of that particular oil at any given time.

So we, you know, put it in capsules that make it go through a little a little faster. And, and this is, this is proven to be very, very effective. And, we're right back to the sources of things.

See, we don't just we we can't just use peppermint oil that you you buy off the, the internet. Our source has to be USP. So there's certain things that are important about that, not the least of which is, is that you get again, you get a certificate of analysis.

It tells you what's in it and what's not. So that's would you be able to see whatever impurities are there or not there. So you get a very pure form of the peppermint oil.

Yeah. This is you, you know, you you brought up an important point for Lyme patients regarding the stomach and the acid, capsules, you know, be able to get us through the stomach.

A lot of patients, of course, they have stomach upset when they do these. I also know that, you know, to try and get an extended release doxycycline sometimes from the pharmacist can cost an awful lot of money.

And I know on occasion we've we've called you guys and said, can you make me an extended release doc. So you're minnow, right? and that's been helpful for the GI tolerance.

So you want to just talk a second about that because that's really been great for us all to. Yeah. Well, I, I mean, you can you can help me here that the, the GI tolerance is part and parcel of the fact that Lyme disease patients at this, you know, they'll, they'll, they'll be allergic to things that they never were allergic to before all of a sudden.

So this would be, you know, mast cell mass, multiple chemical sensitivity kind of stuff. this has everything to do with how we prepare things. And, yeah, you can go ahead and get a sustained release product of a certain antibiotic.

But the other part of that, which is kind of cool is, is that when we make it, we make it typically make it die free. Okay. And, you know, titanium dioxide free.

We make it. Yeah. in other words, all of the typical incipient that are used in commercial products we don't use because we don't have to. And titanium dioxide really just got taken out a couple of years ago because I remember without mentioning where we were getting the sauce, but I used to get a liposomal go to file and they were using it.

And then the company contacted me and said, you know, the data on titanium dioxide not so good anymore. What do you think about, you know, switching? I said, absolutely. so, yeah.

things like magnesium, stearic, that's a very the other another very commonly used thing in Big pharma. we don't use things like that because we don't need to.

And we've taken a lot of pains to make sure that the chemistry of the formulation works. We don't just add, you know, random excipients. You know, we do all kinds of different ones.

I have patients that are so sensitive that, we've we've actually used things like carrot flour as an excipients in the capsule. And that has worked in many different, many different patients.

we've used coconut flour. We've used all kinds of different things. and again, this is part and parcel of, of the importance of a compounding pharmacy.

You get to, you know, you get to pick and choose which is, important. And this is important because the mast cell aspect, I mean, you and I, we know who some of these patients are who are sensitive, but the one patient you and I think are probably talking about, she'll she'll have anaphylaxis going outside when they're mowing the grass.

Right. And, and this woman's mast cell is just off the wall the minute she gets exposed. She's only been able to tolerate your compounded medications with coconut flour and carrot flour.

Right? Right. This is this is true. And, you know, that's the, the you know, that's the other part about Lyme disease patients and writ large is there's a certain it's, you know, the immunology is very complex.

And for whatever reason, they can be, you know, fine with one thing one minute and then a couple of weeks later, they're allergic to whatever it is. I mean, I just talked with, a patient yesterday who can only eat one type of food.

She's her. Her mix is so bad or her mast cell is so bad. Yeah. So, Yeah, these are, we become the only option at that point for medication. Right? And you and you guys have been compounding ketoprofen for quite a while.

For us, for the mast cell. Are there. Any of. What what what other things are you doing for the mast cell that maybe even I don't know about? Is there any other products apart from Ketoprofen you guys are doing?

yeah. Well, we've been using the carton often, almost exclusively. The the neat part is, is that carton often is only commercially available in the United States as an eyedrop.

they've been using it in, in Europe over the counter for, you know, for years. But the only way to do it orally is to have it compounded. And again, you're, it, it has some very and interesting properties relative to, to mast cell.

And we've been doing a lot of, a lot of work with that. I mean, at this point, you know, like I said, thousands of patients on, on keto often, we have been it's not something we do a lot of because there's certain things having to do with the commercial product.

But we we still use Chrome on, not not all the time, but we still use some of that. there there are a few other things, but, you know, the catarrh often tends to be the mainstay.

you know, the other thing, you know, writ large is, is that we already we know that they have these, these difficulties so we can make things that don't have the items that they're allergic to or have problems with.

now know also years ago, I, I don't have to do I. V.

Hormones, Thyroid, and Bioidentical Dosing

therapy so much anymore ever since I discovered them. But years ago, I remember when I could not get the insurance companies to approve, IVF transaction row seven.

I would call you up and go, what is your cash price for it? And I was amazed that it was like a 10th of the price of what the insurance companies wanted to charge.

Some of these patients, are you still are you still compounding and getting people things like some of the I. V. drugs that maybe their insurance company is not covering?

Oh, sure. Yeah, we're still doing I. V. drugs. Have have done have done that kind of thing for years. yes. We're trying to keep the prices as low as possible again, like at the beginning of our conversation, our our focus has always been the patient.

And we understand Lyme disease and Lyme disease patients and the fact that insurance doesn't cover a whole lot of things or they don't want to, or the testing isn't right, or there's a lot of different, different reasons.

the the interesting part is, is that, not only have we, you know, tried to keep the price low, but we, we manufacture things or make things in a way that are patient friendly because you're usually doing this in the home.

And a lot of times patients are doing this, kind of not on their own, but, you know, they're kind of self administering things. Right? And they usually have a nurse or somebody who's actually thing.

But but yes, they end up doing it. but a lot of times that so there's, there's different products like home balls and different types of I. V. tubing that we've used over decades that help people do these kinds of, things in the home.

A lot of times, a layperson would would think IV is fairly complicated, and it's it, it is. But we can make it less complicated, I guess, because we've done this for so long, we can we have, you know, some of the I.

Forgot, this is a good thing you brought up talk a little bit about because I remember I used to get these years ago the patients who are worried about hanging these drips from the poles and the rates talk about these balls that you're actually using to be able to give them a constant flow.

I think this is fascinating. It's I think people should know it's available. Other really interesting. Yeah. Yeah. I mean they're they're they come in different sizes and they're, they're, they call them elastomeric because they're elastic.

And what we do in the clean room is we fill these they're, they, they start really skinny. Okay. And then when we fill them, we fill them with the diluent and the drug itself until you get about a baseball or softball sized, hum ball.

And then there's a little piece of to when it comes off of this thing. And they the, the fact that they're elastomeric, they can work upside down, right side up.

It doesn't matter. You can put them in your pocket. You don't even have to hang them off of an IV pole. And the, the it's it's just like a balloon. It creates pressure and everyone goes, well, how does it know how long that this goes for?

Well, it's all physics. It's the length and the diameter of the tubing itself that controls how fast the the diluent runs into your in into your IV line.

And, like I said, they're, they're, they're fascinating and they're compared to an IV pole. They are incredibly convenient. you know, you're just you're flushing your line like you normally would.

You hook them up and there's just there's no button. You just flip open the catch and it runs and it's it's done. It's like a set it and forget it. And then when it is done, you clamp it off, you know, flush your line and, and you're done.

Right. And I think the beauty is when people are using, you know, they have to do home infusions and they usually have a, a home nurse who taught them to do it.

You guys are always available. Like if if people have questions about sterility, administration, side effects, they can call you up at any point in time.

As an ex, an extra person, right, to make sure that they're doing this properly. Yeah. That's the interesting part is, is hey, we're always available during, you know, during working hours.

But we also have a pharmacist on call after hours. If you call the one 800 number, you know, and push zero like you're trying to get to the operator, count to ten slowly.

Because what it's looking for is the pharmacist on calls. Phone it. That's what they're looking for. And that's that's available 24 seven. And, that is kind of useful not only for IV's but some of the for some of the other stuff too, because some people, you know, they have questions about their compounded medication.

It's not as obvious as some of the other things. And, we, we like to be there to answer those questions because it's,

it's important to how they, how they get the dosing, you know, administration routes, all of that stuff because we do others, not not just IVs, but injectables to, you know, methyl cabal, and other things that are given subcutaneously or intramuscularly.

So it's important to have somebody on staff that that knows about those types of things. We do bladder instills. So that's that's another thing. Right.

And we've used both for the people that have methylation issues, we've actually compounded hydroxy cabal I mean right versus Mal, you guys and that's also that's that's true.

That's an excellent compounding medication for those people who just can't take a methyl B-12. Right. Exactly. Yeah. And there's all kinds of reasons to do it.

There's there's methylation issues. And then, you know, you know, different types of B12 are also good for, peripheral neuropathies. So. And which is, you know, you've used that for years successfully.

so and if I'm remembering correctly, even years ago when I couldn't get by selling, I don't use it anymore with, Benzedrine, penicillin. But I think also we were even I can't remember if we were getting it from you years ago because we couldn't get it from regular sources.

Are you guys have it available in case people need it? Oh, yeah. Yeah, that it did it did, benzo thing, by selling LA went out of print for a while, but yeah, we do have access to that.

when it went completely out of print, this is what happened. We actually see, intravenous penicillin. JC can be used intramuscularly. It just has a very, very short half life.

Well, we took a page out of the World War Two handbook, and we gave, these these, these intramuscular injections of regular penicillin. But to keep it in their, their body, we used another drug, oral drug called pro benefit.

And, and what it does is it keeps the, the penicillin from running out your kidneys and throw out through your urine. So it keeps the drug levels high.

So we were able to use and intravenous medication intramuscularly, along with an oral preparation to keep the levels the way they were supposed to be.

Yeah that's great. That's when that's when it wasn't available at all. So yeah. Right. So so so Randy, we've been discussing and I'm just thinking if there's other we went through the subcu because you're right.

Methyl and hydroxy cabal I mean we use all the time. All the time. We, we we talked about using compounded peppermint oil and methylene blue, which we use for daptone all the time.

Right. Yeah. low dose naltrexone, which I'm using in most of my patients. The compounded pain creams compounded, medications for people with chemical sensitivity.

Peppermint Oil, GI Tolerance, and Extended-Release Medications

Marcelle, with the coconut, carrot flour, hormones. what else do you think he thought of? And are there any other, like, glasses of things that you guys are doing that, people may not be aware of or they have access because I think those are probably the most common ones we have used.

infuser. For. Yeah. the, the one that we, we nearly touched on a couple of moments ago was the bio identical hormone replacement or the be that, that is something that we've been doing for so long that, some of the other pharmacists and I, we, we actually teach other practitioners how to do that.

We have, we have different classes for that so that they can understand exactly how to write a prescription for

something like that and that, that's a whole there's a whole beautiful kind of, area that involves not just the hormones themselves, but it also involves the thyroid, which we talked about, and also, some of the, the, adrenal gland stuff.

So there's, there's three portions to biological hormone replacement. It's not just the hormones, it's also your thyroid and it's also your adrenal glands.

You have to take all of that into account. Yeah. So so for practitioners for example, that want to use bioidentical. But let's say they're local to begin doesn't want to do it.

if they need to use E-3 vaginal suppositories, you know, a milligram putting capsules, you can compound those for women in menopause, right. That maybe don't want us to dial.

But you teach. You'll actually teach the doctors the right amount. Like you'll get the body weight from the woman. You'll say, listen. Yeah. Based on the hormone testing, this is the amount of estradiol I can use.

Less. More. So you will adjust it based on the blood test. The doctor, in a sense, doesn't really have to worry. They just have to send you the blood tests. Right.

And you'll help do it with the follow ups with the practice. We do all the recommendations for that. Yeah. If they go ahead and send us some, you know, some lab work and sometimes, we go ahead and, and kind of talk to the patient a little bit to find out what they're currently using and then create a recommendation for that, you know, involving the three things that I talked about because there's, again, you have to take all of those things into consideration.

you know, the thyroid stuff can sometimes be a little slow mixing. Go ahead. And you can send us those those labs. We can suggest the types of labs that you're going to need, because typically with somebody does thyroid, they do T4, T3 and then some some TSH.

There's a couple of other things that are important about the laboratory work for that, like reverse T3 or total and free T4 and T3 because there's like five different places where thyroid can go wrong.

And if you don't have the full set of labs, you can't really pinpoint where that occurs. So, that's something we do a lot of a lot of times you can yeah.

Like I said, send us the labs and we can send you a recommendation for all of those things. You know that. You know, that to have someone kind of even if you've gone through the training, which I have, you know, at these integrative conferences, to have a pharmacist hold your hand during the process and do it with you.

I think it's a great bonus along the way, because I think people have a lot more confidence, right, in prescribing that way. Oh, definitely. Yeah. There's there's you know, I know some of those in the there's instructors, you know, the a forum and the other there's nothing wrong with that didactic portion of those.

Those are, those are great classes. You should do those. The problem often is, is, is that when you get down to the nitty gritty, the nuts and bolts of it, and you've got a laboratory result and a patient and you have to write the prescription, sometimes that is that's where we can help the most is, you know, route of administration, dosing, what to use, what not to use.

There's there's a lot of different things that go in with that. So let us blessed be your guide. We've been doing it a long time. Right. Yeah. I you know, the E-3, one milligram suppositories, vaginal suppositories is the one I probably the most common I used to do over tentacle years ago.

I left the Giants. But, you know, you're reminded me actually, now it's this is actually why this is a great conversation. It's even reminding me that.

Oh, yeah, that's right. You guys actually do that. I forgot you did this for us. In fact, many times over the years. It's actually a great reminder. Yeah, yeah, we, we we we love stuff like that.

It allows us to get even more into some of the, the patient profile kind of stuff. And, and sometimes not all the time. Sometimes we see other options or other opportunities while we're looking at because there's so many systems involved.

Sometimes you notice other things and there's other, you know, other things that can be done. You know, I just had something like that happened to me just yesterday.

I was doing a profile just like that, and I noticed that the patient was was on two of the basically the same thing. It was it was therapeutic duplication.

So today I'm going to be calling the practitioner and kind of letting them know what that dosing probably should be and some other options that we can do for the patient that are probably more beneficial.

That's again, that was just a happy circumstance.

IV Therapy, Elastomeric Pumps, and Home Support

I was I was doing what we were doing, and I found something that was, important. Now it doesn't always happen, but it's a good thing to the second pair of eyes.

Yeah. You know, Randy, this has been fabulous. So are there any subjects you think for the compounding? We we haven't covered because I, I think I've gone over most of the ones that we use.

if you. Have, we've gone over. Yeah. Most of the, most of the things that are truly important. the only other thing that I could possibly mention is, is that, over the last probably 12 years or so, but decade or plus, we've done a lot of work in the area of interstitial cystitis.

this is, a classic kind of, you know, fungal, bacterial infection that nobody can quite nail down the lines. Mark. Patients complain of it all the time.

Right? And, what we've what we've done is we've, kind of, utilized or leveraged some of the DNA PCR technology for lab work to see what those organisms are in the bladder.

And we've been able to go ahead and choose really effective antibiotics for those particular lab for that lab work. And, to treat those organisms, both fungal and bacterial.

And we do it through, we get to use some pretty exotic antibiotics because you do it as a, as a bladder in still from the outside, which means you get to use things like vancomycin and mayo glycosides and all the other stuff.

That's very effective. But you don't get all the other side effects because it never gets into the systemic circulation. so you get to treat something that has been untreatable for 10 to 20 years with, with some, again, some pretty exotic things.

And but these would, these would be people if I would be self categorizing to be able to do the same thing. Yeah. That's the other thing that we've, that we've kind of, we've kind of taken the mystery out of that.

Some people, you know, typically did that in a, in a, in not a hospital setting, but yeah, hospital settings, but a practitioner setting. I've had anywhere from 20 year olds to 90 year old self care themselves.

a lot of times, for the most part, we use eight French pediatric catheters for this. They are incredibly tiny. You don't really need a big adult catheter for this and this.

This, I can't tell you how happy that makes me, because. Right. The idea of bladder installations is using anything more than an eight French. It's kind of like what Marty saw.

Doctor who loves to torture people came up with this idea. Right? Right. And the other thing that I mean, part of the reason was, is that a lot of these patients already had physical impediments, already had damage to their urethra.

And so we the smaller catheters worked fine. There's no reason not to. You don't need an adult catheter. you know, ten French to to do this kind of thing.

And when I, when I talk to them about it, it's like when you have the catheter in your hand, you'll understand what I mean. Because when you have one eight French in your hand going, oh, this, this is tiny, this is really tiny.

But it's effective because I'm only putting in about an ounce of fluid at a time. Okay. And into the end of the person's bladder. The other interesting part is we get to use some EDTA in there.

Typically as long as the, the antibiotic can, can live with it, the EDTA breaks down the biofilms so that the antibiotic can do its job. And that's another huge advantage to think.

You know, it's interesting you bring that up because I just spoke to somebody the day before in the Dapsone protocol, even though I'm not using it all the time in some of the highly resistant patients, I've talked about the week that they do the Dapsone pulsed for when they finish the nine week oral double dose with one pulsed and they do this.

I've actually told them to use EDTA suppositories in this case, to be able to break up the biofilms. Apart from using biocide and cinnamon, clove, oregano oil, stevia, peppermint oil which you're compounding.

so it's actually it's a great reminder because, yeah, I even we have been using some of that, not just for collation when lead is high, but but also for biofilms.

Yeah. The, the other important, aspect of, of, of treatment has been the use of, intra urethral gels. These were, these were in response for the longest time we thought there were reservoirs of bacteria or fungus, and we weren't quite sure where those were, where they inside the bladder.

Well, come to find out, it's some of the cells in and around the urethra. We're kind of internalizing some of that bacteria. And it's a it's a hard area to treat.

So what we did is we took some of the same antibiotics that we're we're using in the bladder, and we put it into a gel that's very sticky.

Bladder Instills and Urethral Gels for Chronic Infections

And, you know, a one cc syringe with about a half gram of, of gel in it, intra urethral, it spills out the edges. If you do this twice a day, you have basically a topical application of the same antibiotics.

And it really and it's not for all patients, but for those that are fairly urethral specific, it has been a huge improvement, a huge improvement. Now Randy this is when we're almost coming out of our of our talk.

Boy that went I, I have to tell you, this has been I think, this is going to be probably one of the most useful conversations people have during the Healing From Lyme Summit because, I couldn't do what I do without comparing medications.

We've been using you, I mean, for decades at this point, I yeah, I can't say enough good things about Infuserve in you and all the staff that works there, because what we've loved about you is not that simply, you know, your pricing is low and you're always available and you're always helpful and compassionate, but that you are you are there all the time to help solve kind of medical problems.

when we have difficulties with it. So, I mean. I think, yeah, you know. Having that kind of hand-holding and support for what we do as Lyme doctors, to have a compounder like you has been essential.

So I want to thank you and the whole staff in Infuserve of because, I think people are gonna have a much better idea after this talk. Why use a compounder when to use them?

and even for doctors that they may not have known that you're available even for consultations to help. with figuring out some of these medical problems that otherwise they can't figure out.

Yeah. Thank you for that. Because that that, Yeah. And and you and I have been friends for decades at this point, and but thank you for that. I really do appreciate it.

yeah. We're we're kind of in our prime for that. It's this is, this is the benefit of of years and years of doing things like this, and, we're we're in a great position to provide that kind of, you know, problem solving, if you will.

And, it's it's again, it's a tool in your toolbox. It's not something you use all the time, but when things get tough or things get a little weird, sometimes a call to us can at least put you in the right direction.

That's great. So. Randy, just remind people one more time. phone number. Best email to contact you if they have questions. Sure. The phone number is real easy.

It's it's (800) 886-9222. And then the the email for right now would be, Randy. My name. Randy@infuserveamerican.com. Yeah. Right. So Randy, I want to thank you so much for taking the time to do this today.

and for those of you who've been listening, my name is Dr. Richard Horowitz. I'm co-host for The Healing From Lyme Summit with Myriah Hinchey, and we are having just a fabulous Summit.

this is one more of the great talks you're listening to during this Healing From Lyme Summit. I hope all of you are enjoying it. and I look forward to seeing you again all soon.

if you have any questions again, you know the information, how to contact Randy if you need any compounding solutions. So thank you again. Randy, it's been great pleasure speaking to you.

Please give my best to everyone at Infuserve. I will, thanks doc. Have a great day. You too. Bye