Podcast Intro and Guest Background

Where mark ons comes into play. But he showed in this study in 2003, Mark ons. He looks on toxins also cause further degradation. Msh msh is extremely important for firetrucks movements. It it affects the immune system and it affects the end of creatures.

So they are huge significant disruption caused by the inflammation that toxins produce. Welcome to Doctor Talks the podcast where every episode leads to a healthier you.

Join us as we navigate the world of optimal health, uncovering groundbreaking strategies to conquer chronic disease. In each episode, we'll bring you the latest insights from leading health experts, medical innovators, and wellness warriors.

If you are seeking to transform your health journey, or if you're looking for answers to burning questions. You've come to the right place. Get ready to unlock the secrets of lifelong health and vitality.

This is Doctor Talks, real talk from real doctors on the issues that matter to you most. Hi. Welcome back to the Integrative Health Podcast with Doctor Jen.

Today we're going to be talking to Doctor Joseph Musto. He is president and clinical lab director of where I do a lot of my testing for mark ons. And we're going to be talking about that a lot today.

Doctor Musto is the president and director of laboratory medicine, medical director and founder. He was formerly medical director of Diagnostic Laboratory medicine for more than 20 years.

And then he founded microbiology docs. He's been involved in laboratory medicine and methods of developing for clinical testing for over 50 years, with more than 20 publications and coauthor of seven issued patents.

Doctor Musto earned A, B, S, C in chemistry and MSC in Organic and Physical Chemistry, the equivalent of an FS, MSC C in biomedical Science, and a doctorate in medicinal chemistry.

Doctor Musto is a board certified Clinical Laboratory Director and spent ten years pre and post doctorate training in clinical laboratory science before establishing his first clinical pathology laboratory in 1979.

That's amazing. Doctor, me so so, so nice to have you here. We've talked on the phone multiple times, and I would love for you to just tell the audience, like why you're so passionate about about clinical science and laboratory testing and, and more about your background of how you got to where you are today.

Defining CIRS and the Shoemaker Protocol

Okay. Well, with regard to this whole, bio toxin illness, an associate of mine called me back in June of 2011 and said there was this doctor in Maryland looking for a laboratory to do some special bacteriology testing.

And I called him, his name you may recognize is Doctor Richard Shoemaker. And we had about a half an hour conversation. He asked me a lot of questions.

And, it turns out over my career, I was a hands on clinical scientist as well as textbook clinical scientist. So, at the end of the half hour conversation, he says, okay, I'm going to have all the doctors who follow my protocol send these cultures to you.

I said, fine, so we set that up. This was when I was the owner and director of diagnostic laboratory medicine. In

2015, I established microbiology PDX, and we continued testing for all of us clinicians, doctors and so forth.

That followed Doctor Shoemaker's protocol. Over my career, I've been involved with endocrinology and toxicology, infertility testing. And I was very big on message development.

So this came along and I really dug into it. And, over the last 6 or 8 years, I've done a number of studies and reports on additional treatments for my colleagues, and we'll get into more cons in its definition.

And so first, so I continue to do that. And for any of the clinicians, I have a very nice summary sheet of suggested names and spread treatments, both compounded by compounding pharmacies as well as products that are available on the internet, which are generally quite effective and considerably less expensive than the compounding Covid.

But we'll get into that in a few moments. So that's that's pretty much my background. I actually, studied for a year and a half or so ago and passed the test that Doctor Shoemaker has created, and I became it serves Cirrus proficiency diplomat.

Which made me feel good. Gave me another credential. And so here I am. And, if you'd like, we can start by kind of defining what chronic inflammatory response syndrome is.

Okay. Yeah, I think that would be great. And I think what's so important and why I wanted to have you on is because it's so important to test and not guess.

A lot of the times, and especially if you're kind of stuck and hitting roadblocks, it's it's really good to have these tests. It's so important. Moving forward because Sears is such a chronic disease, and it's really not recognized by many doctors.

And one thing I love about having actual tests is, and I know, you know, as a clinical scientist and spending your life with this, then we can actually get the conventional doctors be like, look, we have actual evidence.

This isn't false, this isn't snake oil. Because a lot of the times we get pushback. So I think that's why it's so important to have these tests available.

So let me begin with, a brief discussion about chronic inflammatory response syndrome. Yes. This is something the name I think we started back in the early 2000.

Doctor Shoemaker coined that. That name. And what are the what are the issues? It's. It's an illness that affects multiple systems and produces multiple symptoms.

Now, he looked at it from his experience back in around 1997. Where toxins that were produced by plantation, growth in lakes and rivers and these toxins were killing fish and the young fisherman were getting very sick.

And he found that treating them with Covid. Steinmann, which was at the time a cholesterol lowering drug, what it did is pull the lipids out of the bile and reduce the cholesterol.

And he found that the coast I mean, that's a binder is very effective in pulling the toxins. Fish dead fish toxins, if you will, out of the individual system.

And the symptoms disappeared. And I think that was his first publication in around 97, 98. In recent years, chronic inflammatory response syndrome has been expanded.

It's a bio toxin. Illness can be primarily 80% of the people who develop this have exposure to water damaged buildings, whether it be in their home, their apartment in the school, and the water damage produces mold, bacteria, bacteria like that, you know, might see these, tick bites from, this year from, Borrelia, I should say.

And, it was found all about 20 years ago and was actually taken out on a bio toxin produced by. Really, so many different sources, but 80% of it comes from the water damage built.

And these toxins get into circulation. They cause a significant upheaval of the innate immune system. And there's a certain genetic issue that 24% of the people have in the country, and they don't recognize these foreign toxins.

So the immune system, the adaptive immune system, can produce antibodies to bind up these toxins and eliminate them. And that's where the cold irony comes in.

As an early part of the treatment.

MARCoNS, MSH, and Diagnostic Testing

Now, more cons. It's an important part of the Doctor Schumaker protocol. It's step three in a 12 step protocol. And water mark ons. Mark ONS is an acronym for multiple antibiotic Resistant correct negative Staphylococcus.

Now I've spoken to patients who bring a report to that primary care doctor. And at the top of the report it says staff code negative large amount mark cons positive.

And the primary primary care doctor will say oh staff go ahead negative. That's normal for well. In this case it's not normal for Mark. Cons has been found not to be an infecting bacteria or colonizing bacteria.

Generally doesn't show symptoms of rhinitis, sinusitis. It does show symptoms in some some patients a brain fog cognitive dysfunction. The reason for that is it was found back in 1998 by some scientists.

Physicians in Australia that certain Covid negative staff produced toxins, toxin exo toxin A and B, and hemolysis, another toxin. 2003 Doctor Shoemaker did a study with 512 patients.

To show the significance of Covid negative staff patients who had what was called at the time chronic bio toxin associated illness, which became a chronic inflammatory response, and these patients had no MSH from these toxins circulating in their system.

Well, where mark ons comes into play that we showed in this study in 2003, mark ons, the exo toxins they produced also cause further degradation. Msh msh.

An extremely important woman in bio toxin. Was it? It affects the immune system and it affects the endocrine system. So there is significant disruption caused by the inflammation that the toxins produce.

And we see an increase in cytokines. When the MSH is reduced it leads to cytokine production which causes a whole host of symptoms. Now Doctor Shoemaker, a number of years ago took 37 symptoms associated with bio toxin elements.

He divided them statistically into 13 clusters. He found if a patient had one symptom in each of eight of the 13 clusters, the probability of bio toxin illness was 92%.

Then he added to that a test, a visual test that can be taken on the internet or with a proper device in a physician's office called visual contrast sensitivity.

Visual contrast sensitivity. If the patient fails that test and has one symptom in each of eight of the 13 clusters, the probability of bio toxin illness chronic inflammatory response syndrome is 98.8%, so it's extremely diagnostic.

It has some course the patient more than $15 for the test. And the percentage is so high that then would be confirmed with a series of blood tests, including the genetic test HLA Dr.

BQ, which would show one of about 15 different haplotypes that are associated with bio toxin movements. So I

think that pretty much shows serious and how mark ons fits into the whole diagnostic picture.

Now at microbiology docs we do nasal cultures for markers. When we do the culture, we send the kits out with the swabs and preservative and so forth. When we get the swab back, we planted on several different media and we make it a general culture.

So it's not just mark markers. Whatever bacteria grow out, we report. And we decided to do that back in 2015 because are the one that's a physician face to face with the patient.

We don't know what their symptoms are now if they have symptoms, aside from chronic inflammatory response, they may have symptoms of a sinus infection.

And by reporting a complete culture out, it can be helpful for us as a physician. So I was surprised, as we did this week. And two organisms very common E.coli, Klebsiella, enteric protease C, non metrics like Pseudomonas.

And it gives you a complete picture. We'll report that out with mark ons and work up these other organisms sites. We see now we we offer a fungal culture as well.

And again the reason we offer that is the patient could have sinus symptoms of the problem of an infection. And if the doctor thinks this could be a sinus issue, then he or she can order both the bacterial culture from more common and other bacteria and the formal culture and get it richer.

We offer a biofilm test. Doctor Shoemaker contacted me back in about 2016, and he said, you know, you should develop a biofilm test for markers. So I searched the literature and developed the biofilm test.

And, based on the study that Doctor Shoemaker did back in 2003, looking at Covid negative staph reduction in MSH. We found that if the staff collect negative mark on positive showed methicillin resistant, it was much more difficult to eradicate.

So in in a suggested treatment listing that I send out to doctors, indicate that if there's methicillin resistance for the microbes, it would probably be efficacious to extend the nasal spray by 2 to 3 weeks.

With regard to the biofilm, I also suggest that if the biofilm is moderate to strong, but they also add to through which to the typical medicine spray treatment.

So someone's listening out there and they're like, well, how does this even happen? Right. How do they get these weird bugs up their nose? What would you tell them?

One, it's very basic, and it's hygiene that people are not washing their hands multiple times a day. When you touch a doorknob, who knows who touched that doorknob before you?

And if you run your fingers past your nose, you can fix that up.

How MARCoNS Spreads and Who Is at Risk

One of the first questions I'll ask a doctor. Yes, that's the patient. Have a dog or a cat? Doctor Shoemaker found out several years ago that dogs can carry them all kinds.

And I was at a meeting talking with a number of doctors. The question came up about dogs carrying Vulcans. One of the doctors asked me if I ever any question on cats motion. No.

Well, there were two doctors there. Each had five cats, and they sent me ten cultures on their cats. I think eight out of the ten were positive for microbes.

So we now know that animals can pass that on. The other part related to animals, especially dogs. And, you know,

people love their dogs and dogs. Lick their face and you don't know where the dog's tongue was five minutes earlier.

So that that's another source. And these bacteria are ubiquitous. They're everywhere. And if you're out in a public bathroom and you just touch a doorknob, God only knows what's on that going on.

So it's common to see these. Okay. Yeah, especially kids too. You know, they're always picking their noses, touching things. So it's just that environment though.

It's it's dark. It's moist, like bacteria, especially fungus. Love it. Right? Yes. Yes. I'd like to mention a couple of points. With regard to, Treatment.

But before I get to that, I want to talk about staph aureus and Bursa. We see quite a few cultures, basal cultures that are positive for staph aureus.

Some are positive for mersa. Now, it turns out that the literature indicates that about 25% of the population carrying staph aureus in individual passage, they don't know they have it unless they have a reason to have a culture, you know.

Oh, yeah. Absolutely. I can believe that. Well, I always thought that, like most. So this is very off topic. Not really. But my kids would get like a little bit of eczema patches here, but it really wasn't.

It would only it went away if I treated them with, an antibacterial agent here, specifically me. Pearson. And it's interesting because, you know, I trained, I residency medical school, so I, I for sure was colonized with mersa just, you know, I was just in it and most nurses and doctors.

Are I bad and I think I pass that on to my kiddos. Oh, yeah. So that's I always felt bad about that. Well. We see it very, very often. Had seen something in the literature that indicated that Covid negative staph doesn't grow in the presence of staph aureus or mersa.

And it turns out that staph aureus. So Mersa produced some toxins that kill off staph, quite negative. Now there are about 13 common strains of staff, correct?

Negative. And one of the 1 or 2 of the strains are capable of being resistant enough to these toxins. So about 1% of the time we will see a report. I need you each report every day.

About 1% of the time you see staph aureus or mersa with markers. I reviewed about 500 plus reports that were positive for staph aureus for Mersa to see how many of those had mark ons.

That's where I got the 1% from. And the literature says that it kills go negative staph. So we did some experiments. Of course, we have these organisms available to us where we incubated.

We inoculated a broad with with both staph correct negative and staph aureus the next day throughout 37 degrees. We then planted it on agar. And the only thing that grew out was the staph aureus.

So that added to the support that staph aureus kills off. Now, if the patient has been diagnosed with Sirs, then the question comes up. Should the patient be treated to eliminate the step forward?

So the person and I know some doctors will not treat the patient, therefore it's because it prevents the microbes from growing. Interesting. Most of the nations praise them and talk about those in a few minutes.

Would be considered a broad spectrum. Antimicrobials, and I use the term anti-microbial rather than the antibacterial, because when you talk about antibacterial, you're talking about drugs.

And here these are not drugs, but they're able to kill off these very children.

Treatment Options for MARCoNS and Nasal Infections

One point that I'd like to make in terms of treating patients with all kinds, it used to be thought that use the appropriate nasal spray, for example, with, the big spray.

And I can talk a little about that and it may be four weeks or six weeks, two sprays each nostrum three times a day. And then the clinician will say to the patient, I'd like you to come back in a week or two.

And we do a culture. The patient comes back and they have positive microbes. When the culture. This goes back 4 or 5 years ago, the doctors were thinking that the bug spray was becoming resistant, but it had been used for a good ten, 15 years and it might have been developed systems.

In a conversation with Doctor Shoemaker about two, two and a half years ago, with a follow up with an email for confirmation. He said the patient was low in this age within 1 to 2 weeks, just going to contract.

Microbes. So the best thing to do a culture is a week before they're going to finish the initial spurt, whether they're on the nasal spray for six weeks or ten weeks, whatever that is, a week before they kind of finish.

Do worry culture that will indicate that the nasal spray was effective. Patient stays on for next spring until the report comes back. Report usually comes back within one.

Hopefully the report shows spray eradicate the marker. And they should now go on to maintenance. Those. Now this is based on Doctor Shoemaker's protocol of the 12 steps.

And the last step in this protocol is facial activity testing of peppermint Yankee Nasal Spray. It turns out that there are four requirements for the patient to be able to get that news and spray.

One is they have to be out of a moldy environment to which they have to pass the beaks test. Three they have to be negative for markers, and four, they have to have blood tests for my patient and GGP for the liver before they get the administration.

You got be. So that's where the importance of maintenance group comes into play. Now he recommended 0.25% EDTA one spray each nostril twice, get. I have found, there's a nasal spray that I have some favor if you will.

It's on the internet. It's called ACS nasal spray. It's 50 parts per million. You can buy three one ounce bottles for about 25 or $30. I suggest, and it's up to the doctor.

The decision that they use that is in the spray. And how long? When you say maintenance, I mean, how long does that mean? Well, it could be 3 to 6 months.

That it may take that long for the patient to get through the entire protocol, you know, with the binders and then the blood test, monitoring the patient, TGF beta, MMP nine to see for rate and so forth.

Yeah. And you know, a lot of because I have practitioners that listen to my podcast to some of us are more doing like a hybrid. Right. Like we're we're using a little bit of shoemakers, but maybe not all because sometimes it's hard. It's hard to get that blood work.

It's actually impossible. And then insurance doesn't cover it. It's like $1,200. Right. So, so some and a lot of people, they can't pay for coolest diets.

I mean, it's expensive or they can't tolerate it. So some of us are using a little hybrid. But I do know that the, the nasal part, sometimes they will have patients that their mold is treated.

But we're stuck here on, on this nasal part and, or they that's the only symptoms they have. And and to be fair you know and going with Doctor Shoemaker if, if you don't treat that and there's more corns present and you don't treat

them, you're just going to keep that inflammatory response going on.

Now have I, I think I talk to you about this on the phone before, but I love Cfpb, which is a peptide that is part of MSH. And I, I feel like the patients that I've put that in their nasal symptoms, you know, their cultures like have gotten better a little bit faster.

I mean what are your thoughts on that. Because if there are people listening out there, it's kind of like this ridiculous like cycle of you have low MSH, alpha MSH, so then you're allowing the mark ons to thrive, but then you can't get rid of the mark ones, like you just said, because there's low MSH.

So it's this kind of like circle. So well the Cfpb I did some reading up on that earlier this year. And It turns out that MSH is antibacterial and Cfpb is antibacterial.

So I would say. Just like that antibacterial I saw some studies and it was effective against staph aureus. And it was effective against Candida. So I'm making a assumption if it's effective against staph aureus it would be effective against the of going negative.

So I think that's why you're getting such a good response with the Cfpb. Yeah. It's been it's been really helpful. So we were talking about the maintenance dose sorry.

Yeah. And so they're they're on the maintenance dose. When would you recommend retesting then. So they're off the bag or they're off, you know whatever they're on and then they're on the maintenance.

And what about symptoms too. Because sometimes it takes a while for the the symptoms. And I've had, patients say anything from just a stuffy nose. They're not sleeping well.

They feel congested to like a deep brain headache that really nothing has worked until we eradicated, you know, bacteria and candida in the nose. And also, like you said, brain fog.

The brain fog, like blurry vision, like a coat over their eyes. Like very, very interesting symptoms. And we've ruled out things like brain tumors and vision checks.

Yeah. And and that's the thing. It's these people that come to me and then I'm sure that are getting testing with you. I mean, they've been through the conventional medicine gamut, like they had every scan.

And you do you want to rule things out? You can't just say blame everything on mold. You have to do your due diligence and rule things out. But but so many people just never get better.

And that's when we need these specialty testings. And to really dive into the science of why they're still feeling like crap, why they're still getting brain fog, this inflammation.

Well, I think part of that could be if the microbes are present. And when we send the report out, most of the reports will show a large amount. Okay. We categorize it as a small amount, a moderate amount of large amount.

Now, it's not like a urine culture where a laboratory actually measures the volume of urine put on the plate. So we get a colony count of greater than 100,000 or number like that.

Here we're getting a swab. So it's not quantitative. It's but, I think the toxins that the Martians are producing can cause the symptoms that you just described.

And eradicating the mark on to eliminate those symptoms, in addition to the negative effect it has on MSH. I think both of those are very important. And I've spoken to a number of clinicians who have been doing, work in the field service for ten, 12 years, and they tell me if the patient doesn't eradicate them on cons, they never get completely better.

So I think from what you just described, it could be a patient like that. I could see where the Cfpb would be beneficial. You know, if if the if the MSH is normal or close to normal.

But this is just a little piece of information in this study that Doctor Shoemaker did back in 2003 showing how the MSH was suppressed in chronic fatigue patients and what the effect was on the court.

Negative step. I lost my train of thought there for a second. Yeah. So let's let's talk about well, you go back on that, VIP spray. So. Yes. Yes. One.

I, I'm, I don't use it a lot in my practice because I feel like the patients that have come to me early on in my practice from other providers that were on VIP, they, like they say they can't get off of it and they're like, if I stop it, I feel awful.

So I've just tried other things. I'm not one to jump on that quick to prescribe. So what is what have you seen? And then part of me is thinking, well, maybe they didn't do good on the VIP, and they feel like they can't come off it because they went on it before their mark ons was eradicated.

Well, I've spoken to some patients who have been on colloidal silver, either what I mentioned earlier or a compounded version of that. And. It turns out that patients take it upon themselves to do various treatments, like rinsing with saline.

Well, if you rinse with shaving and you run silver, you don't separate the time between silver and the same. If you inactivate the silver, it produces silver chloride.

And I've spoken to a few patients who said I was on the ship for several months and had no effect on me, and then I asked them about silver and sailing and that's probably the reason it didn't work, that there's got to be other reasons.

I think the key point is. Doing whatever is necessary to get the message of. Oh, and the point I was going to make about Doctor Shoemaker's study in that study, the MSH reference range that he used had a lower limit of 26.

In recent years, the lower limit has been 35. And, just a point of importance here. I know that LabCorp did a reevaluation of their normal range, and they print on their report 0 to 40.

I'm telling as many doctors as I can that Doctor Shoemaker says that's incorrect. Still, question 35, they didn't change the method. They just statistical analysis on what they called normal patients who probably weren't normal.

So I spoke to clinicians who tell me if they get a patient, compassionate message less than 8 or 10.

Maintenance, Retesting, and VIP Discussion

And after eradicating more cons and treating three four months with a binder that their their MSHA go up to 20 to 2425 and the patient feels significantly improved with their symptoms.

So, and I know that some of the clinicians don't use of the IP, they're able to take the patient through with the binder elimination of markers and working to treat the cytokines to get them down into the normal range.

And all of that contributes, making the patient feel better. And the key point is that these test seems to be extremely important in the Shoemaker protocol.

Before they start the VIP, they have to pass. And I don't think that's done all the time. It's it's an inexpensive test and it's. Right. And I didn't mention this, but I'm sure you know, this, that what the Fuchs tests showed is whether or not a patient has toxins by toxic neurotoxin circulating in their system.

That's why they failed the test. So it's a very important test. And the good thing this is it's about it's inexpensive as

you can be of all that that should be done.

That's the least expensive test. So yeah. And for those will say it's a it's a visual contrast test that you take online. Yeah. And yeah. And and it's sometimes I will if a patient doesn't if we don't know if the molds in the house or not.

Sometimes I'll be like have a family member take that or your spouse and we'll see if they fail. If they fail, you need to get a good or a mediator in there, an inspector.

I think that's really such a hard part with mold and mold. Illness is living in it, and in the VOCs and and just not knowing where it's at, you know, maybe not having good inspectors, especially if you live in certain areas of the country.

It's it's very challenging and it could get really expensive. But you know, if you're if you're feeling like crap, there's a reason for that. And yeah, and you know, having having Mark ons, having mold and being exposed to it, it's going to cost so many health problems down the line.

It's just something you have to take care of. Now I, I do want to say one more time that what you said about the silver. Oh okay. Because I think it was like over a year ago or so.

And then you told me that and I was like, no one, no one has talked about that. I had not heard that before. So silver nose spray do not use around nasal saline spray.

Use them separate. And it's it's just so fascinating because it's just I don't think a lot of people know that would you say I feel like it should be on the silver bottle?

Yeah. I agree with you as a product. I've done a number of studies on all these different products over the last 7 or 8 years. There's a product again over the counter.

X beer. Yes. The are and that's grapefruit seed extract and xylitol and that was quite effective in eradicating bark on. Oh good I like x clear. I, I recommend it sometime you know to acquaintances that they just ask about stuff.

Or if people ask me on Instagram, they're like what's a good nasal spray for prevention? And even with viruses, because they have it out like, you know, the conventional drug stores.

So it's it's good. Yeah. The, the yeah. I found to be effective against gram positive gram negative mold and used now this little grapefruit seed extract is anti-microbial.

Xylitol is as well. And that's also used to break down biofilm. And I know some clinicians will have the patient use the zero in the morning and at bedtime.

Two sprays each nostril. And then during the day use the silver if they can fit in three doses, two sprays internationally three times that. I recommend that there be a two and a half or three hour time period between the silver and anything would say.

The next year they should save. Okay, There's another product that I just recently finished doing a study on. Again, it's something on the internet. It's called Highland Mist.

H y l a and I asked and it's, grapefruit seed extract and how you run a question, which is supposed to be very soothing to the mucous membranes. And it has bacterial activity as well.

And I found it to be effective against gram positive gram negative. So, so that that's another I think it's an $8 for two ounce bottle and experience around the same 8 or $10.

And what what do you think of the iodine based nasal sprays. Iodine. I had done some experiments several years ago with that. I think they're quite adequate.

What's more, current depends upon how concentrated they are. And if there's no natural irritation, right. Yeah. And that could be a problem because I've had patients before where they have gotten bleeding, you know, because they're just so dry and irritated.

Let me mention something about that. The big spray doctor Shoemaker worked with a pharmacy here in Massachusetts called Hopkinton Drug. Hopkinton, about a year and a half ago, was sold to a pharmacy in Texas.

And all of the formulations from Hopkinton went there. But I've spoken to doctors across the country, and for some reason. The concentration of gentamicin, which was in the original preparation maybe 20 years ago or 18 years gentamicin was 0.025%.

I spoke to a doctor in Texas for them three years ago, and she was treating herself research, and she told me she had to stop using the pink spray because after four days she had a nosebleed.

That's the what the concentration of the gentamicin was something like 2% which is outrageous. I don't know where those numbers came from, but I can say that I haven't spoken to anybody who had a problem with the 0.025%.

And I think it's still an effective alternative. To treat. And then another method I know we have done with a patient before is just hydrogen peroxide nebulizer.

Can you talk a little bit about that. Yeah, I think some experiments with that 3 or 4 years ago. And I found that it was effective 0.5%. And I'd recommend it to some clinicians.

The patient can purchase a 3% food grade hydrogen peroxide. And the reason for the food grade is it doesn't have any preservatives. What we buy in local pharmacy will have conservatories, and it's best to keep away from that.

The problem with the hydrogen peroxide is you can't get it from the pharmacy. They don't make it up. The patient has to make it up themselves. So I suggest that they start with a 1% solution and they can either use it in a nasal spray bottle.

If they have one, they can wash it out and in 1%, if they find that it's irritating, they can make up 0.75%. And I have a little scale, a little cheat sheet, if you will, that if you take one shot glass of 3% hydrogen peroxide, several shot glasses, put water or shaving, you can make up these different solutions.

And I suggest that the amount that you make up to use it for maybe 4 or 5 weeks and then discard it, make up a new batch because of the deteriorating concentration.

But it's hydrogen peroxide. It's very effective. I found point five, which was cut off. We state point five Ohio.

Additional Therapies and Practical Clinical Tips

And and that would and I mean I guess with all the cons like why does some work for some people, some for others. Just because we're all we're all different and it's just kind of trial and error.

Right? I mean, nothing's cookie cutter when it comes to this, right? If you look at the susceptibility, the lab report, you'll see more cons positive and you see a paragraph that explains more cons and MSH and so forth.

If you look at the susceptibility. You got a lot of bars. There's 14 or 15 drugs on that list. And I've seen 10 or 11 bars on some of the patients. And I know that that's going to be more difficult.

So you may want to use for longer duration for the treatment. Generally it's about six weeks. And if you have a lot of resistances, I would extend that for three or 4 or 5 weeks.

I want I want to make mention of something about silver. There's two products that are commonly used. One is called Quick Change and 23, which is 23 parts per million.

And the other is this nasal spray, which is 50 times. I did some looking into toxicity of ionic. So these are products that have some form with a plus one charge.

And if you take a tube of either one of those and you add some say you into, it's going to get cloudy, it's producing silver chloride. I didn't I looked into toxic toxicity.

Now with the some spray 50 parts per million that's used for six weeks. The total amount of sodium person consumes is 2.52mg of sodium. To reach toxicity.

This would be in a 70 kilogram individual. You would have to do 1386 cycles of 50 parts per million, to reach toxicity. So you can see it's going to take years to reach 1300 cycles, right?

So even I'd like to talk a little bit about nebulizer. Of course these products could be nebulizer. And I think we spoke on the phone about the nation that okay.

I suggest to the doctors we're going to have the patient do that, that they get a one, one, two, no syringe. And with the nation that which is specific to go up into the nasal passages and.

Okay, if you put one ML to the left side, put another through the right side, or you can even use more if you had. That should be very effective. And that would get into the sinuses, push the nasal spray, even if the patient holds their nostril and does the other national with the spray so as to get deeper, I don't think it's going to get deep enough into the sinuses, but the the nebulizer definitely will.

And I, I know, the standard pipe nebulizer with the mask that goes over the nose in the mouth, that's also very beneficial when that'll get into the whole respiratory system.

And that could be a reason why maybe people aren't eradicating this. Well, you know, about four years or so ago. Doctor Shoemaker had worked with a biological dentist and found that patients who've had extractions or who have had cavitation can be harboring more codes, and those patients will never be able to completely get rid of microns in the patient passage, so that there's something else to be aware of.

What's the dental status of the patient? One of the things silvers, by the way, I didn't do this with the unscented, but I did it. Product. The silver breaks through the virus, and kills the bacteria.

And I did experiments to prove this. So either one of those silver products could be used, and I would suggest that the origin and is going to be used to do an extra spray.

So two sprays each other to four times the whereas with the Asians being 55 million, they could do that three times a day. Now there's other products.

And these can be purchased from Candy labs. That's the lab that purchased Hopkinton from. There's a product that's based on, which is and I did studies on that, and it was quite effective against microns and other bacteria over the years.

It's a combination. It's called whistle backs with 4.5%, 2.5%. And 0.25% EDTA. Egg spray is still available. But there's another nasal spray I did a study on which is stronger than the, actually XDR and the Hydra mist.

It's grapefruit seed extract. It's 2.5% point 5% GDP. So that's another one. It's a broad spectrum. And yeah, so there's quite a few choices that doctors can use.

Prescription drugs. I should say prescription formulations are usually about 100 and $2,040, including shipping, whereas the products that are available on the internet, like the high levels, are gentle picks.

Next year there will be much, much cheaper, much more great. And it just takes time with all of these methods. It just it takes time. And I think everyone wants like a quick fix for everything.

And it's like it takes time to change your biome of your nose. Like, yeah. Well thank you, doctor, so much for being here, Doctor Musto. And, Or Musto.

Sorry. See, I said it wrong. We were even joking about how his name is must, like, musty, like mold. So. It was so funny. But thank you so much for being here.

And just, like, going into detail about these things, because not a lot of people do. And this will also be a good podcast or reference for my patients because I don't sometimes we don't have an hour to talk about the cons.

So yeah, all the treatments that I mentioned, I'm sure anybody interested, I have a two page sheet that goes over all of these. I'd be glad to send it out to anybody.

You question okay. Is it fine if I leave your email in the podcast? Yeah. Okay. Awesome. Yeah. And it's great. And if you're a clinician ordering this test, it's so nice.

You can always call is always there to talk and to go over the labs. And I've had to do this with a few tricky tricky cases. And you're always doing new research, new products out there, which is great since it's so helpful.

So thank you so much for being here and how I'm going to drop your email. What is the website of your lab company to share? It would be, microbiology.com.

Awesome. And I will put that in the notes too. Thank you so so much. Hopefully there was like a tornado watch it. So I had to put in my airflow. Well watch it's not a warning.

Warnings are worse. But it was like storming and I was like I couldn't hear you for like five minutes there. Well I was fine in my my earphones. So I'll just go back and listen.

Thank you. Foreign, foreign, thank you so much for being here. Very well. Thank you for tuning in to Doctor Talks. We hope today's episode has enlightened and inspired you on your path to optimal health.

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