

Caspar Szulc:

Casper Szulc, co founder of Innovative Medicine and host of this podcast. Excited to share this episode as we go into what might very well be the next big thing in medicine, since stem cells back in 2002, there was an article from Dr. Michael Ramsey, a Baylor University Medical Center entitled "Will Stem Cells Transform Medicine". The article starts out with a quote from Harold Vargas, director of NIH that states stem cell research has the potential to revolutionize the practice of medicine and improve the quality and length of life. There is almost no realm of medicine that might not be touched. The article goes on to weigh the implication of using stem cells, a pretty touchy subjects and concludes as a society. We are obligated to balance what we are capable of doing against what we should be doing. These decisions are critical since they shaped the future of medicine and healthcare for our communities.

Caspar Szulc:

The future of medicine is now, and the tough decisions must be made today, but that was almost 20 years ago now. And while we can't deny stem cells have incredible potential new developments in other areas of regenerative medicine are making some serious waves. And one of those areas is PRP platelet rich plasma today's guest is an expert on the subject and the creator of a new system using PRP to vastly improve outcome, personalized treatments, and utilize intravenous super concentrated dosages to not only recruit stem cells, but also to help treat a host of chronic diseases, including neurodegenerative and autoimmune conditions. And that just might be the tip of the iceberg of what's possible. This is the story of TrueDose PRP with Tapley Holland.

Tapley Holland:

So about well now it's going to almost five years ago. Prior to that, I had always been in the regenerative medicine field and I was what you would call, I guess, a field expert that I would be called in the field. I was speaking physicians and I, and I guess just because I had a photographic memory, I could, I could just have a lot of study and information on recall. And then and then, so that led me to just having this, this specialized role with the company I previously worked for. And I had this idea about, I guess, what TrueDose would be, you know, many years ago, but it wasn't until all right. In 2015, I was on a mission trip and at the end of the trip, they said, Hey, we got this kid, who's a quadriplegic will will stem cells work for them.

Tapley Holland:

And I said, well if you look at the literature, you know. Especially if you're, if you're dealing with an injury at this area, nothing will work nothing. And to make a long story short, I said it, but if you get him for , I'm coming down here. I'm, I'm, I'm coming back down here, even though I have to do it on my own dime and a week later and get a call. And the only way I can describe is, is it the moment I said, yes, I would go if it was, if it was, if it was possible to prevent me from getting there, anything that delayed me because I was working on a time crunch the, they said, Hey, we can do the surgery, but, but it has to happen at this time. And a seizure won't do it. And if you gotta understand down there where I was going, it's not something that they were really open to say.

Tapley Holland:

They usually don't elect to do surgery on these types of patients, but I'll just put it that way. And it's just much easier to not do surgery, but I said, I'm coming. And so when I finally land at the airport, I, I wake up and immediately this, the only way I can describe it is is some sort of divine inspiration came to me

where I knew exactly what needed to be done, I can't describe it other than I knew exactly what to do, how to do it, how much where. And

Caspar Szulc:

Now you were a field expert for 15 years in regenerative medicine, correct?

Tapley Holland:

Right.

Caspar Szulc:

Okay. So you had that leading up to it. You had this expertise and you're in this place and suddenly this inspiration kind of comes about you with this specific case, right?

Tapley Holland:

Yeah. I had, no, I had no expertise in say spinal cord injury.

Tapley Holland:

You know which is what we're dealing with. Cause you're talking about, you're talking about things that, that, you know the injury we were dealing with is there's no turning back. I mean, think of Christopher Reeves.

Caspar Szulc:

Right.

Tapley Holland:

You know, where there really are zero options. And so, so and that's kinda like the, the, and I had no background in that, that wasn't even my field. I did mostly in bone and orthopedics and neuro related things, but nothing spinal cord related. So, and as I'm driving to the hospital or as the guy's taking me to the hospital, we had a two hour drive. I quickly am like, okay, I have the idea. And I quickly start googling articles to kind of verify will this work. And in my head, I'm thinking, okay, I can't, tell anybody what we are doing there's no way. And when I get there, more problems are happening to me and I'm sweating, and I'm kneeling down.

Tapley Holland:

And the, the, the, the they're waiting for me in the surgeon terms makes is, okay, what are we going to do? And, and by the way, this is, I think this is the first time I'm telling this story because, what we're going to do. And I said well, we're gonna do this and we're gonna do this. And he goes, okay, hold on, wait, we're going to do what?,

Caspar Szulc:

Hmm.

Tapley Holland:

How many of these have you done? I said this is my first one. How many have done? And he, he goes, well, well, this is my first one, too. How do you know this is going to work? And I go, I don't know how to explain this, but I know it's going to work. And that's all I needed to say. And he goes, okay, okay. Hand me this, hand me that, and the machine breaks and more problems happen.

Tapley Holland:

And I'm on my knees and I'm on the floor. And then, and you could see sweat coming through my, my hood and, and or my cap. And he's like, what's wrong with you, my friend, let me just tell you what I just went through to get here. And I tell him everything. And you could, you could tell that that, that they, it kind of paralyzed them a little bit like, okay, maybe this is something that is just, this is the forces of good and bad, and he sits and he goes to a, have you ever heard the story of Joe in the Bible? And I go, I've never read the Bible. I don't know. No, I don't. He tells me about it. And he says, Hey. And at the end, you know, Joe was rewarded for a stableness and his, and I said, well, Hey, that, that's why I'm here in the moment.

Tapley Holland:

I said, that's why I'm here. The, the, OR wall falls down.

Caspar Szulc:

Wow.

Tapley Holland:

All of this is sterile field. I mean, you could've heard a pin drop through the whole, through the whole OR floor. And it wasn't like, you know, he looks at me and goes, my friend I've been here long time. I never, never seen nothing like that. And behind the wall was black mold. You gotta think in that moment, I was like, I knew in emphatically, that if there is good and evil, that this is it, this is, this is the clash of the Titans right here. And it confirmed to me just what this was. So we did the, the whole treatment on him. And the next morning there was no expectations on anything. And again, they, they treat all these, they treat these patients routinely because of the way that they transport down there on, on the Island.

Tapley Holland:

So they see these routinely. So, so there was, there was no expectation. And the next morning he wakes up and he's moving his shoulders.

Tapley Holland:

And if, to give you some context, or maybe people who are listening some context, if you have a spinal cord injury right here, and you don't get intervened within 24 hours, the literature overwhelmingly demonstrates that you, your chances of getting, gaining any new neurological function back is virtually less. It's virtually almost less than 1%. And so this kid was seven days out. So he starts moving his shoulders. And then, you know, the video that you saw, you saw through two weeks, and then six months, the kid miraculously, he's now walking. Right. So then three months later after that first kid, I get another call. And I'm like, you gotta be kidding me. Yeah. I'm not. So I said, I wasn't going to go down there because I just didn't want that to be, I do.

Tapley Holland:

I just wanted that to be what it was, was just kind of just I'll call it a divine appointment. And I didn't want to, I didn't want to, I don't know. I just, but that's, that's definitely not me to, to be thrown into these situations, but I went anyway. And if you can imagine things happened worse. They did. And for this podcast, I, I probably shouldn't tell all the bad things that happened because, because. But very, very similar things, very, very similar things happened. And the difference between this kid was he was 25 days out from injury. And if you look at any stem cell trail in the world, they won't take anybody past 20 days because I told you what happens at day one, but at day 20. You're never getting anything back ever. So this kid was, if it could be worse, the first kid, this was worse.

Tapley Holland:

And he again, more bad things happen. And I'm like, and, and I came back in the, OR after, after I said, Hey, look, this is what happened. This is what I came up with. This is the best I got. And he goes, that's all they can do. And a lot of praying and, and waking the kid up from surgery, and they're telling, Hey, Ricardo, you know, move your left hand, move your left hand. And, and he starts to move it like this. And he's like, you know, I said, well, he's like, I can't, it hurts. It hurts. He just didn't know that he was twitching his left hand because he had moved it in almost 30 days. So, the.

Caspar Szulc:

What kind of procedure did they actually perform?

Tapley Holland:

Well, they performed, you know, surgery on his neck where they, where they instrumented it. And in my part of it was, was really the regenerative medicine part of it.

Caspar Szulc:

Right.

Tapley Holland:

And what's interesting about the second patient was that, again, within three days he was moving his arms and it day 30 half of the ICU contracted pseudomonas, which is an awful bacteria bug, which will, and, and he, he basically locked up like he hadn't written mortis and, and, and make a long story short. I made the decision to it on the first kid to because we use bone marrow. I made the decision to go ahead and use the PRP with it, which I don't know why I did that. And then we did it in the second kid. And now I know that had we not used that PRP on either one of those kids with the mold and the vet and the pseudomonas, they wouldn't have survived because of all the antimicrobial and antibacterial properties of the PRP, the, because those kids in the ICU died from pseudomonas.

Tapley Holland:

He, there's no way he shouldn't have died. With an exposed spinal cord and whatnot. So that just, if you could imagine, then it became the ALS patient, then it became the infertility patient. Then it became the MS. patient. And I'm like, what are these things that are happening to me? And what are you, what am I trying to be shown here? And then my son became vaccine injured, my fifth child, and then it became personal. And then I realized in that moment that I think I know what I'm supposed to do. And about, about that time that I was, was peeling the onion back on, how did he get autism? . I had a dream. And in that dream, . It was very clear to me that I was supposed to build this software and develop this TruDose product that I had long thought about, you know, years before. And with the profits of

TrueDose, I'm supposed to, erect this facility that we treat these unmet need diseases a destination spot that would be basically in North Texas. And, and then it became real clear to me when I woke up exactly why I was being shown all of these unexplainable encounters with things that you've never read about.

Caspar Szulc:

It's a surreal story tablet.

Caspar Szulc:

I have to say so much of great innovators and integrate creators have had, I'm not going to say similar stories cause they're not similar. They're all different, but I've these moments of inspiration I have had these signs given to them I've had these dreams, everything. So you know, it follows in line with that. And it is really interesting now, you know, the thing that I'm really excited to get into is to talk about why did these things happen and what happened next, right. This idea of TruDose. Because if we go back a little bit, PRP platelet rich plasma has been around for a long time and it's mostly been popularized, I think in sports medicine Tiger Woods, Raphael Nadal, and in aesthetics and anti-aging Kim Kardashian, populize the vampire facial. Right. And it kind of went from there. So a lot of people do understand it's a kind of properties and healing that, you know, those sorts of issues or helping people in the beauty and aesthetics anti-aging world.

Caspar Szulc:

But in reality, it's, it's much more powerful. And I mean, you just gave amazing cases of what can happen with PRP. So can you go in a little bit before we even get to TruDose? And why is this different than regular PRP? What's the big deal about PRP? Cause everyone's talking about stem cells, like that is the end game is stem cells. And that's where we'll be able to rid of all diseases, which I think is, is, you know, up for debate of course, but where does PRP fall in the conversation?

Tapley Holland:

So that's like the most, that's like the million dollar question because what I'm getting ready to explain to you, that makes sense. Because all those cases I just described were all with bone marrow and I had, and when I first got into the career in the medical field with medicine, it was with PRP.

Tapley Holland:

So I came into the field when PRP was just kind of just getting kind of cool with medicine. But I, but if you look at the medical literature and how they evolve therapy, it was like, okay, we think it works. It has these applications. Let's move on to the next. And then we'll, we're gonna move on to the next stem cell. So we're so far down the line with, with what's the next stem cell, the magic bullet. They actually cures this, that we never really understood the proper or the healing potential of the very first thing, which is PRP. So when I started bridging bio sciences, knowing that we've, we've moved on to this, we were so far in, down into the cell that we're making it so confusing for people that patients that I said, if we're going to do this, then we can't start with bone marrow.

Tapley Holland:

We're going to have to start with what people understand and they understand blood and they understand PRP cause it's been around and it's it's published and it wasn't until, and so we started with, you know, lucky to set sports medicine and anesthetic based things. And there's no doubt that the

TruDose thing, the TruDose and the actual dosing of it was making hair growth exponentially better. There is no doubt that it was turning these out, comes for me applications into . People aren't coming back after the first treatment. I never knew that it would have these untapped potential until I went to the University of Minnesota. And this was, I was a year into this with the company. And I we were treating these three ladies, okay. At University of Minnesota incurable hair disease. And these ladies had been under their care for a decade.

Tapley Holland:

And I had tried everything, Steroids, and lasers I said, Hey, look. And even PRP, I say, look, I think if we just try this and dose it appropriately, that it'll work. And you gotta understand these weren't ladies who had just some receding hairline. These, these women look like they had mange. I mean, I don't know how it's, it's awful. And at 30 days unexpectedly, the physicians saw hair growth and it really just blew their hair back. And it's 60 days I saw the growth and at 90 days, I mean, there's no known reports of it. And I was sitting in the airport and I was like, okay, why are these women growing here? It doesn't make sense. It does not. There's no way because they have an auto immune condition that the PRP should be doing this. And then I just quickly dug in the literature a little bit and I tripped on something and I called my wife and I said, Hey, when we get home, we're going to try something because she's, she's usually the test pilot for things that we did.

Tapley Holland:

My fifth, my son became injured. I said, we're going to try something. And she's like, will, it kill me?. I dunno, I don't think so. But I think it's going to work, and do some things that, so we get home, we did it and we supercharge it and we gave her the the intravenous therapy and it did all kinds of things to her. Unexplainable, unexpectedly, then it became a second patient, then third patient. And then by the 15th patient, . It was, we were starting getting referrals of people who had severe depression, psych psychological disorders, autoimmune conditions. And it was like, Hey, will this help my friend who has this? And I'm like, I have no idea. And then, and then after a while, it became really clear that we totally missed the ball on the untapped potential of what the, the ability of our own platelets can do.

Tapley Holland:

And the regenerative capabilities of something as simple from our own blood can do. Because and, and, and now if you look at now the scientific literature, it totally matches up because, because now it's kinda, it's what we did not know and understand about PRP long ago. They're now starting to understand, like right now, the, the antiviral capabilities, the antibacterial capabilities . What we've tapped into is really the, the neuro capabilities.

Caspar Szulc:

Right. And it makes sense because in medicine, we know there's a saying called the devil is in a dosage. It's, it's incredibly important to know what type of dosage to give to a patient. And you're basically stating that the downfalls of a lot of PRP in the past, and what we overlooked for almost over a decade now is that we weren't looking at the concentration and how to personalize that to the patient so that they have the most effective response to the treatment, to the platelets that you're providing them. So tell me a little bit more about TruDose and how does it get to that super concentrated, incredibly tailored you know, dosage for each patient.

Tapley Holland:

So if you think about like, I mean, just, just to restate what you said, because it's, it's because the concept of dosing version of medicine is very counter intuitive. You know, it's very easy for safe things we take, you know, like medicines because we have to metabolize it, but we don't think of things in terms of medicine. Cause it's, it's, it's counter-intuitive to think that if a tissue is injured, does it really require a critical number of cells that actually start the healing process? And the answer is yes. And is there a critical number of cells that could actually lead to inhibitory things dance? Yes. And so if you look at PRP in general, I'm just going to say probably 98% of, of what is being done across America, aesthetic based and sports medicine based is, is it's not even scratching the surface to what a therapeutic dose should be.

Tapley Holland:

You know, if you take here's how many plates I have circulating my blood, here's what therapeutic starts most PRP are right here. And so what TruDosedoes is really a testing platform we created . With it incorporates artificial intelligence. And so I need, I can take a sample of your blood that day because, you know, platelets are gonna vary depending on what's happening in your body. And then I can take that measurement. And now that the software has determined and learn those specific it's for certain conditions, you know, knee, injection hair auto immune related things and all those, because it's learned the dosages, per mil. So if you think about it, I have to have a certain number of platelets in each mil of injection that I inject, because that's what dose is. Right? And I only say it like that because that's a very counterintuitive thing I just said, and yeah, this is the dose that I need.

Tapley Holland:

And I know that one of the components is determining how many platelets I have that day. Then I need to understand how many platelets I have. And then in between that process, there's so much variability between the centrifugation process, between the way you handle it, between the way that the technique there's about seven or eight different variables of mixing and baking the cake before you get the stuff in the syringe, the artificial intelligence normalizes, all of that. And then it says, for you Casper, I need to take 88 mils of blood from you to have this healing dose through your shoulder for your sister. I didn't take the same condition, 62 mils, it's 41 mils. So the amount of blood that we're taking from each one of us will be different, but you each get the same dose. And so up and how that's different from say how it's done in a day.

Tapley Holland:

If anybody listening has had a PRP done, they could, if you walk into an office, a clinic and let's say 10 patients, we're going to walk in with a knee condition. And let's say, the doctor says each one of you had the same condition. You're all going to get PRP. We're going to draw 20 mils of blood, 20 mils of blood from you, 20 mils of blood from you, right. So everybody's really a size nine shoe. TruDose says, nope, this is you. This is you. This is you. But you all get the same dose that's required.

Caspar Szulc:

Yeah. It's really interesting because I've had traditional PRP therapy. And it was, it was a good response, I would say for myself, but I understand everyone gets a difference, but it was kind of, some people saw results, some people, And there's always been a little bit, I think of a question Mark, due to that. There was a little bit of ineffectiveness and it was everyone just got, yeah. The same treatment. You're all the same. Let's inject you. And that's it. Whereas when I went through the process, cause I had the TruDose, a regenerated and I loved it because it was so tailored, so specific and precise, you know, getting that

readout and seeing that AI working on a computer screen to show you the platelets, to show you the numbers, to make you feel confident of what's happening was, was such a godsend to the old way of doing it basically, which is just Poland re-Inject Centrifuge. Re-Inject. I really appreciate that.

Tapley Holland:

Well, you you know, and, and really the funny thing is that unexpectedly, when we the first site that we were doing this says they were mostly aesthetic based the conditions and within 90 days, which is typically for a hair, the treatment, the hair was going, Whoa. And the, the sexual dysfunction was just Whoa. And usually the treatments are offered in kind of packages. You know, you know, we offer a three treatment package for this amount of money. And I got a call one day and she said, I think we've got a problem. Patients are getting better, you know, with, with the first treatment. And I'm like, well, what's the problem? Well, I offer three package deal, which is typically what I've been offering. And they're wanting to get some money back and I go offer, you know, charge more patients don't want the patients don't want to feel like they're going in and, and, and buying a car.

Caspar Szulc:

It's their health. If you, if you help them. I said, if you help them understand and why and what they're getting, they want that. And if you personalize it, so it just dawned on me that that I was going to be having this problem with every office that we were going to be going to. And, and so what subsequently happened is, is that, all of these offices, I started to charge more because the outcomes were better. And I'm like, if the outcomes are better, I wouldn't want to pay it's my health. You know, I wouldn't want it. I don't want it to look for the cheapest. But when you, when you give people 20 mils, 20 mils, 20 mils 20 mils, or you treat everybody like a size nine shoe, and you don't tell them why, You force people to price shop, and people don't want to price shop. They want information,

Caspar Szulc:

And they want value. They want to understand that if they're spending that money, they will get better. And that's what you're seeing here is you're giving a very precise dose. You're using incredible technology to get there, and you're super concentrate. You're getting billions of platelets. And here's the other factor I have to bring up a little bit, you're doing it in an IB push. You're going intravenously with a lot of this. And that's really interesting. Cause most of what PRP is either just transdermal, you know, in a facial or in, directly into the joints. But this is actually going through an IB push directly into the bloodstream. And you know, that's part of my question for this is why did you choose to go directly into the blood? And the other part of this question would be what type of conditions are you using it on? Because it's going beyond injuries and antiaging, correct.

Tapley Holland:

I commonly make a joke. It's not even a joke. It's really sincere that we're way past an pain [inaudible] I'm will, I'm way past making my hair grow. We're on the things that are really unlocking. And, and unlayering the, the, these, these, these real problem conditions, autoimmune related metabolic related things.

Caspar Szulc:

And let me read off some of these, because I was looking at the literature and what you guys have bridging biocides, Rheumatoid arthritis, Lupus, Hashimoto's, Thyroiditis, Lyme disease, Parkinson's disease, Multiple Sclerosis. These are serious conditions that are impacting more and more people, and



we don't have adequate answers and solutions. So this is really interesting that you're seeing these results using this TruDose PRP on these patients. And do you attribute some of that because you are now utilizing in an IB push that allows the platelets to go where they need to, to regenerate certain cells throughout the body and not localized?

Tapley Holland:

What you just said right there, because what we know about the platelet, so what medical conventional medical wisdom has taught us about the platelets is that they're largely for clotting, right?

Tapley Holland:

You know, platelets are the reason that I, that I don't bleed out when I get a paper cut. But if you, if you, especially with the coronavirus, if you look now platelets are circulating your body and doing two things, looking for things to repair, and they're looking for the things that have invaded you. Okay. So let's just start with things that have invaded you, you know, bacteria, viruses, things like that. Let's take a virus like let's just call it maybe a kind of coronavirus. When, when the platelet comes in contact with the virus, we largely think the white blood cells are going to be the ones coming to our aid. As far as our immune, actually that's, they don't, they don't come activated until the platelet says, I need help. I need help. I have something in my body right now, but I need help.

Tapley Holland:

It releases a bunch of antiviral, anti replicating, viral growth factors and peptides and cytokines that basically slow up the virus waiting for the white blood, the cells to come. And actually the platelet was responsible for gathering some of that DNA intelligence from the virus and giving it to the body later on, down the line for us to develop antibodies. It's like, how did we miss this? . You know, and so let's talk about repair. You know, when we talk about IB systemic repair, when we have, I now know that when we have, you know, when we, when we conventional medicine is, you know, we think of our bodies as system, but conventional medicine has taught that our body is a system of parts. That's all, we have different specialties, right? When in fact, our body, all of the body parts, interchangeably work together, and they all are interdependent on one another. If you start to think of it that way, then it really goes down to, well, I have pain here in my head. I just don't feel well that pain could be the root. That might be the reason you're in the office, but the reason could be three or four things that are around the body. And how do you get to that? You can't just stick a needle in your head.

Tapley Holland:

I believe what's going on here is that if we think that platelets are surveilling your body, looking for things to repair and things, too and for invading pathogens, then you have to think that that they're honing or are signaling too. Okay. I have issues here. What's the, what's the, what's the most important thing I need to fix right now. And where do I need to devote my attention? And what's kind of interesting is that many of these patients, they talk about how they have some tingling right here in the back of the head. So you think about that, that's your nervous system, that's your communication. I mean, that is that's that, that is your, that is your control tower of your entire body. So if we can repair that, . Then, then then the body can actually communicate with one another and start to repair this and start to repair that. It's truly marked remarkable. What, what, what was what's really going on?

Caspar Szulc:

Yeah. And the wonderful part of this is you're using what you already have in your body. You know, you're basically utilizing a natural therapy that you already have. Your body already is generate regenerating and your just kind of pushing it in that direction to go further and, and guiding it a little bit more. And isn't it true that platelets PRP actually is somewhat of an activator for stem cells as well, that you can inject all the stem cells you want into your body, without the platelets. They won't know what to do, correct.

Tapley Holland:

I'm glad you brought that up because this is really, and this is a, this goes right to the heart of why I started with PRP. You know, luckily was because when, when, when patients, I think of, I want to get regenerative therapies to themselves. They're because they're in pain and they hurt. When we injure ourselves, the body goes through a sequential order of events. It does not deviate from it. It's really a five stage process. Whether you cut your finger, you get into a car wreck and you hurt your head. It does not matter. It's a sequential order. The first thing that happens is the platelet identifies that there was a repair need, right? The second thing that happens is that it calls upon the immune system to come help and for cellular health, these aren't stem cells that we, that you're talking about. The third thing is I've got to make sure that I have enough blood vascular highways. So the tissue that's been injured because if I don't have blood vessels in highways that are to the tissue, there's no way for stem cells to get there. There's no way for oxygen to get there. There's no way for nutrients to get there.

Tapley Holland:

Guess what starts those first three phases, the platelet starts it, the platelet calls them and the platelet's responsible for laying down those blood vessels. Those are facts. The fourth stage, once the highways are laid down, then the platelet calls upon what we think of stem cells to come in, because now it's saying, Hey, the whole foundations laid the, the, the, the, because I give patients the analogy of, think of a plate that's like the general contractor on a job site. It sees the big picture. It has specialized knowledge coding, you know, city codes, the time that it takes concrete to cure so they can overlap different processes to keep it going on a timeline stem cells. When we think of stem cells, they are, they're like individual independent contractors. I can only know how to do drywall. I only know how to do plumbing.

Tapley Holland:

I only know how to do brick. And so the platelet is responsible for saying, Hey, okay, now I'm at stage three and four. I need three brick guys. I need two drywall guys. Right? The problem is, is that a lot of stem cell therapies, they just inadvertently injected a bunch of stem cells into the body. And when you're in a chronic condition, know chronic disease pain, that means that the body, the body's already allocated resources to that injury. If it's already gone through that five stage processes of whatever payer and the body has moved on, the tissue itself is still hurting and injured, but it's stuck in this chronic loop of stage two, which is inflammation. So unless you initiate stage one again, and start that process over your body, doesn't know to do the normal sequential repair. So if I put stem cells into the body and I'm stuck in this chronic lupus stage two, I basically ignored. The first three critical stages that the body's responsible for doing. And I'd ignore that whole process. Which is, which is the main reason why, if you, if you look at anybody, who's had stem cell therapy that like, yeah, it didn't work for me. Well, the body didn't what to do with it.

Caspar Szulc:

Yeah. It's the information that's so important, right? People think you could just throw the whole lot of stem cells supplements, all these different things that the body, without the information to coordinate it, it's kind of useless. And that's a lot of what I think medicine is seeing now is that you need more informational therapies to truly address chronic disease. Because as long as the improper information remains, you could start to correct things. But if that initiation point of the wrong information is there, the body will go back into degeneration, inflammation, all these things. So it's really like, you know, this TruDose PRP is an informational therapy which is amazing.

Tapley Holland:

I might steal that line from you because that's actually, because that's actually remember when I said, when I was sitting in Minnesota and I said, I tripped upon this thing. And I'm like, huh, that's interesting. Right. Yeah. I said about 30 minutes ago, that one thing I tripped upon was if you look at just platelets, have these growth factors in the growth factors to do this, to do that, one of them is the growth factors to create blood vessels. Okay. And you just said the comment about communication.

Tapley Holland:

And I mean, a minute ago I talked about this, which is communication the body. When you think of the breakdown and all these metabolic conditions, it's a breakdown in the body's inability to effectively communicate with one another. And the way I usually describe it as if you, you know, if this is a, a wire, this outer white covering right here is the protective sheet around the wires and the wires are the things that communicate, right.

Tapley Holland:

But here's the protective sheet. The, when this becomes stripped, I haven't been, you know, communication becomes effective, right. It turns out that one of the growth factors within platelets is specifically responsible for re insulating these wires. And when I saw that, I'm like, Whoa, I've never even heard that, but that makes sense. If we can repair the insulation around our neurons, then, then we should be free from things attacking us. Then the body will want, will have the ability to establish reconnection and communication. Okay. Well that makes sense. Maybe it'll work. That's really the Genesis of how that came.

Caspar Szulc:

No, it makes complete sense when you break it down, right. You do need communication and you need information without those two things. I mean, what are we, why do we have five fingers instead of six it's because of those two things, you know, DNA tells you the information, then the cells communicate to make it happen. So, you know, if it all starts there and platelets are such a big part of that, why wouldn't you look at that more as such a regenerative and, and such a, I would say beneficial therapy for so many people.

Tapley Holland:

Because it's just so simple. I think, I think we over and I mean, it's over. You know yeah. I think, I think something as simple, what do I think PRP, you know, the way we're doing it is is the cure off everything? No, I don't. If I had the ideal, do I believe that cells within our body and within our own body have the ability to regenerate things that are hurting us? Yes, I do. Because, because, because the cells within our body have the epigenetics to talk the same language to cells within our body. They, it understands the cells within our body and have a language that they talk that only they can understand.

Tapley Holland:

It's just, when we come to this point of when we are dysfunction, there's a point to where our body enjoys a constant state of either repairing itself or defending itself when you become metabolic, your body is saying, I have to devote all my resources, defending myself, and I'm in capable of devoting resources for repair. Right. So, so if you can tip that scale back into your favor, like with doing the, the right dose of the PRP, you've now evened out the battle within your body. And so now my body is able to not only defend it myself, but I'm also able to start doing some repair and not just, not just, but not just give me some relief, but actual restoring function. Right. And actually repairing the tissue.

Caspar Szulc:

Yeah. I mean, I've seen the results from what you're seeing and what, you know, patients have, have been new undergone. This therapy have shown, and it's really impressive. Now, are there any safety issues? Cause you brought up the topic before platelets are for clotting. A lot of people know that. And so the idea of running billions of them at a time through your blood, right. Could cause clotting concerns for some. Is that true? Are there any safety precautions with this therapy?

Tapley Holland:

Yeah, there is not. If you look at the literature on, let's just take it PRP in general. Right. It's probably the most, it's arguably the most established thing within the medical literature, thousands of articles across numerous specialties, numerous applications. It is arguably the, and it's from your own blood. So it's largely considered homeopathic. Now you're, you're talking about the the infusion intravenously is where there some eyebrows wringing. Absolutely. Because you would that I don't want to cause clot, but platelets don't spontaneously clot if they don't need to.

Tapley Holland:

Now, now I don't don't take my word for it. Now on my advisory board is, is Jesus Alcaraz, who's an internationally known hematologist in Spain. Jesus Alcaraz, has really pioneered now the therapy for intravenous administration of PRP for cerebral palsy and pediatric patients. So I mean I would never want anybody to take my word for it cause I'm not a doctor. But have we seen any clotting issues? The answer's no. Have we done the best to say we reached out to the foremost expert in the world on hematology with specifically these applications. Yes. And he goes into a nice, scientific way, reason as to why they won't clot, but we there's even been patients who've been treated with clotting disorders. You have had cancer a set of cancers, which would, which would be at, which would be out of the realm of, of no, no way. But these patients are fine.

Caspar Szulc:

Would you say there are better candidates for TruDosePRP and would everyone benefit or are there people that, you know, you'd say, well, these people really going to benefit and these may be not so much.

Tapley Holland:

I think that I think the best candidates are . I would say the best ones that I can say with, you know, let me, let me answer that a different way. Are there things where I can say no doubt? Yes, absolutely. If you fall into the category of no fibromyalgia or Lyme or or even things related to neurocognition or things related to dysfunction, like Dyslexia, no doubt in my mind. There's not enough. And I, I can only say that because early on our journals, you know, when you, sorry, our, our data collection has been patient

journals. Because if you look at patients who live with these conditions, they know their bodies better than anybody else, even the doctor. So we had patients and oftentimes they live with the condition so long that they don't realize these incremental benefits are getting. So we had people starting writing down journals and you can see very clearly themes starting to kind of filter out

Caspar Szulc:

Vision, cognition clarity. Just basically people who just, I have no idea why I'm in pain and I've tried everything that patient, I think, I think and then everybody it's almost and I also think that that for the therapy to have the best benefit is it, you can't just do the therapy by itself. It needs to have really some additional modalities wrapped around it. So for example, nutrition becomes important. Other biotherapies become important laser therapy and also the fall of the treatment, because you have to do the best to get your body into this state, to do the best. And you have to do the best thing to enhance the therapy.

Caspar Szulc:

Yeah. We found at the center just starting with it is that there are absolutely synergies with things like improving the detox pathways while you're administering PRP doing certain nutritional, Ivy's doing certain, even light therapies that can stimulate some regenerative properties, either in the skin or wherever the issues are. So that combination is truly synergistic. It's almost, again, you get the information, then you add more kind of workers, everything, and suddenly things start to go at a quicker rate, that healing response.

Tapley Holland:

You know, I'm just, just to answer your question because it can, it's, it's usually one where I'm hesitant to say anything because it's, you know, I'm not a doctor.

Caspar Szulc:

Sure.

Tapley Holland:

But I know that several of the clinics are now offering this because we're all, if you live on planet earth, we're all have some sort of automind right now, but we're just not there yet. So, the, the, the, I would say that the people who don't have the, the, the, a life changing kind of outcome are really the ones that no, I, I really just want to take it because my friend, she did great or he did great and I just want to try it. I wouldn't, if you have that kind of discretionary income that where you can just try it as preventative. I know that I do it as preventative, because I just don't want to let myself get to a metabolic tipping point. But if you're expecting to have these, you know, these amazing results, if you're not really hurting from something, then you don't really realize that something is really wrong. So you're not going to have these perceptions of, of the benefits that your purse that your friend had, who, who really was suffering from something. Right. If that makes sense.

Caspar Szulc:

No, it totally does. And, you know, I've, I've taken myself for that exact reason, preventative wellness and kind of this idea of biohacking and always trying to stimulate things. So I could absolutely see this in that way.

Caspar Szulc:

Is there such that, I mean, there's always such thing as too much. Well, what, what is the kind of you know, recommended dose? Cause you said after one, people were seeing great things that they didn't need to go back for a second or third injection. So what is, what is the average kind of, you know, number of therapies needed here?

Tapley Holland:

And that, and that depends to give it context.

Caspar Szulc:

Sure.

Tapley Holland:

Because when you, if my pain, if my knee hurts right, then I know that my knee, my, my pain is focused on my knee. That's a pretty cut and dry. If I want to grow hair, then, then I know that I can see the hairs growing. Those are the things that I was saying that there are largely one treatment and they're seeing rapid response or rapid healing. And when you have dysfunction and you have metabolic or some sort of borrower myalgia, it might take a couple of treatments because, because you're having to unwind and repair a cumulative effect of living on planet earth and things that then the result of just lifestyle and, and contributing factors that we have no idea what they are, right?

Tapley Holland:

Medications, foods, environment, . For those people, it might take two, three treatments. And so the answer is, well, how many we, came to the conclusion that you need to listen to your body, you know, your body better than anybody. If you don't need the medication, don't take it. If you feel like, because everybody's going to feel this. Like, I feel great. I feel great. And all of a sudden, you know, that there's a point to where it starts to reflect. So right. When it starts to plateau for let me give you an example. Yep. I can, I can recall two specific Lyon patients. One was in women was 19. When was 62, the one who is 19, her results lasted and kept going and going and getting better and better all the way to eight months. And then she came back in another way, the lady who was 62, she saw those same exact results, but she hit that plateau at about 60 days. Right. You can see that one live on planet earth a little longer. One's a little bit just so she would have to get another treatment. And then you see those results lasting a little bit longer, another treatment, a little bit longer to the point to where that 62 year old doesn't have to, she could possibly get preventative and that's every year. Right. And it doesn't have to go every two months. It's just listen to your body. Your body will tell you.

Caspar Szulc:

Yeah. Are there any contraindications for, from doing it? You know, once a month, let's say, let's say, I want to get to superhuman level here. Right. I want to live to one 80 or something, and I want to keep doing this or any Contra indications I should know about if I'm just going to say, I'd like to keep doing TruDose on a monthly basis or quarterly basis.

Tapley Holland:

Nope. That's what I do. And I know a lot of patients do that now. And the short answer is no, there are, there are no contraindications. And.

Caspar Szulc:

That's the beauty of an informational therapy. Right. It's kind of telling someone, if you already have the information I gave it to you, it's going to do you no harm. It's not that I'm doing. Right. I told you something, you already know if you didn't then yeah. That's great. You have new information, but if you already know it, there's no harm in it. And that's the beauty of the type of medicine we're talking about here with TruDose with Innovative Medicine is you're really doing no harm. You're giving the body what it should do anyway. And if it's already there, it's not going to hurt you as opposed to drugs and chemicals that yeah, if you give the wrong one, you're, you're in some, you know, serious kind of pain danger there.

Tapley Holland:

I think of like, your body is like one of those those, those, those boards they use for for music where you can push all the dials up and down, you can just things, your body imagine like a board. Yeah. Thousands of those switches on it. When we take medicines, we take different things. Our body is constantly adjusting those things and trying to establish normal, right. When we get to the point to where those things are. So out of tune it's it's and, and, and, and now you dysfunction, the question is, is what I do this every month. So my body can start ratcheting these things back to the right frequency and balanced. The short answer is yes, because each time I take the therapy, it's adjusting it and adjusting multiple of them. Okay. Now it's got it's normal. That's not the new normal, that's not the normal you had when you were first born.

Tapley Holland:

It's take therapy again. Let's adjust it back. And I think working it's because it's from your own body, your body wants to repair itself. It doesn't want to stay dysfunction. Right. It wants to. So it's, so if you just give it the power to heal itself, it's gonna know where to put it.

Caspar Szulc:

Yes. Yeah. That's really well said. And that's, that's really what I think every doctor and any practitioners should be going for is how to get the body to heal itself again, not trying to manage it and not trying to force certain things onto the body, but again, get it back into homeostasis into that balanced state where it's doing what it needs to do. Now, one of the things you brought up that I do want to kind of get into is, is the cost because many people may be saying, this sounds fabulous, but what, you know, what am I looking at from the cost?

Caspar Szulc:

Now I know it's, it's several thousand. It could be per injection. But I also know that looking at something like stem cells, looking at something like many surgeries that aren't covered are tens of thousands. If you want stem cells right now, you're probably looking at 20,000 a starting range. And again, like you mentioned, that's not going to go probably a, you know, in a hundred percent effective range of things, you don't know what the outcome will be. So can you address that a little bit to someone that would say, well, you know, it sounds very costly to me.

Tapley Holland:

There's two ways that I always answered that question. The first one is, is, is what is the cost that you think that you've paid living with pain for as long as you have, right? Cause they've done studies on this and looked at the cost of, of out of pocket costs and then 14 year long studies. And the average person

doesn't realize that if you just have moderate pain, just unexplained pain, you don't realize you're spending anywhere from 15 to \$17,000 on average out of insurance costs annually. I can tell you it's that cost of getting the TruDose treatment, even if you got, even if it was a couple of thousand dollars, even if it was \$3,000 and you got five treatments a year, it's way less than what you're paying now. And so then you look at the cost of how long you've been living with the pain.

Tapley Holland:

So my point is, is that people don't think of the cost benefit ratio because they don't realize how long they've been living with it. Cause they it's, you know, it's, it's like trying to tell me, you know, if I'm good looking or not, you don't self assess yourself. But the cost of not doing it, I can tell you is more costly. So the second way to answer that is especially that if you have systemic pain, if you have chronic pain, like my chronic, my knee hurts, I tweaked my knee. Because the fact that you it's largely one injection into the knee when doing it the right way, it's not like you have to come in front of the injection. The knee is repaired. It's fixed. So there's, that's it no more cost. So it's like, even if that cost was \$4,000, I can promise you the amount of medications you're doing, the steroids that you're having to do to go back to the doctor for the knee problem. Is it just accumulates versus saying, I'm going to get one injection in the knee and be done with it.

Caspar Szulc:

Is there any literature out there you'd recommend for people that want to dive down into this rabbit hole books or something,? Whether it's on regenerative medicine or PRP, that you'd suggest?

Tapley Holland:

Totally. I can. I can. The best thing I can do is, is give those I have a library of curated knowledge. Ah, I'll just, well, I've curated studies that, that I've been accumulating over the years and I can give you a link that your listeners can tap into. Cause they should do their own. They should, they should do their own information. They should, they should be well-informed. And, and we've written some stuff on because, because the, the, the IB therapy there is, they're not going to find anything on it. They're going to read anything on it. I can send you some stuff that we've written. They kind of pieces together on why are the IB therapy makes sense? And I can send you those for your readers because at the end, at the end of the day. If you should be well informed about what you're doing yourself, if it doesn't make sense, then I wouldn't do it. If it does make sense then . Maybe you should try it.

Caspar Szulc:

Yeah. And let's go ahead and do that for anyone listening. We'll be putting that up on Innovative Medicine under the podcast post, when it comes out. Now, how many doctors are currently using TruDose in this technology?

Tapley Holland:

I think now we have a close to 26 sites around the U.S.

Caspar Szulc:

Yeah. I mean, it's, it's new. I'm, I'm, I'm glad we're one of those 26, because it's cutting edge and I'm glad to see it going this way, but also I'm glad to see it being selectively used on those who really need the most, our patients we've seen, we've tested this. They need it.



Tapley Holland:

Well, I want to clarify that the we've, we've been hyper selective on who we've on, who we've let use this. So it's not like we've been a Oh, we could do, we could go here. We could go there to this clinic. I don't know want to do that because and that's not why I started this company. My, my point was is, , I want to get this to the right clinics who are doing the right things, who already understand the body's ability to heal itself. And so we've been really hyper selective on who we would use this. And, I won't, I don't think, no, I can tell you right now, we won't come to a point to where we're just going to let everybody use this. Cause that's not the point.

Caspar Szulc:

Right. And what have been the, what's been the general response and even from practitioners and patients so far, what you've seen, because you started bridging bio-science and the TruDose in 2018. Correct. And that's two years

Caspar Szulc:

Now. You're, you're having more and more data and research come in. You're having those independent patient journals and clinical responses come in. What has been that response in general?

Tapley Holland:

Individually I can say that you know, for, for say site-specific pain, like my knee hurts, I think that overwhelmingly we've solved that mystery, you know, will, will it, will this therapy help for other conditions that for other, for other things that are systemic blended, I can, I can say this we're, we're close to, I think 25, more than 2,500 patients. And the majority of them now are mostly I'm going to call them unmet need, you know, the patients who have no hope, that's mostly what this is. Now. I would say that I would say that the response is almost humbling. It's almost the fact that I'd never understood that we would be doing this. I never understood thought that we would be healing, the types of things that we would be healing. I never thought that this would unlock.

Tapley Holland:

I never thought we would unlock this many things. And so I think that there's more than enough patient testimonials of patients having hope again, for the first time, I'll give you an example. A father called me last night, he found my number. His son had autism and his wife headlines. And you're talking about people that have been through the ringer and they've, you know, his son's 15 and, and . At the end of the call, he goes, Hey, look, I can tell that we've, we've done everything. And all I can say is, is for, at least from my son. Cause that's what we were talking about. He said that this is the most strides we've ever made with him. And so the question to your, the answer to your question is, is that, , I still want to be collecting this data.

Tapley Holland:

And I want to make sure that emphatically, you know, this is what the TruDose can treat. These are the types of frequencies that need these, the types of additional therapies it needs. This is type of nutritional planet needs. That's where we're going with this. So we can truly personalize and tailor individual medicine. These are the types of conditions that it's probably not the best thing for it. And, but I can say this as the last thing that I've, we've yet to stumble across something that it's not helping. Let's put it that way.

Caspar Szulc:

That's that's wonderful news. And where can people learn more about bridging bio-sciences and TruDose yourself as well?

Tapley Holland:

We relaunched the website, we took that down. We took, we took that website down. Once I started seeing the once I started seeing the effects and what it was really doing, I took the website down and because, well, I'll do, I'll just say it, if this is truly what this is, then I really felt responsible for making sure that it's kept in good hands.

Tapley Holland:

And so I didn't want to, I didn't want to get the word out. So we're going to be relaunching the website and with, with all types of educational videos all types of informational videos. And along with the TruDose website as well. Well, when we launch into here real soon. I'll get that to your, to you. And it's just been a matter of us curating all this information. So we have, so we can give patients accurate information.

Caspar Szulc:

One last question, actually I had about where does the FDA and the medical community stand on PRP TruDose even the athletic commissions is this sort of, I know athletes do this, but is it doping? Does the FDA, because FDA has some pretty strong opinions on stem cells and it's, you know, a little bit in a gray area, but moving into a regulated and not allowed area. So where do the regulatory bodies fall with TruDose and PRP?

Tapley Holland:

This is a a very important and good question. FDA, the FDA with the passing of the rigid, the 21st century cures act. Okay. I believe it was in 2017 or 18 that they basically want the regenerative medicine discovery and progress to advanced course. However, with the stipulation that, that, that practitioners are using therapies that are well known and the risks are well understood. So when you, when you, when you lay it out like that, there's really only really one, one thing that's really well known and the risks were well understood. You have cells from my body cells that are not from my body. There's hardly any literature. So when people think of umbilical cord stem cells or allografts, if they're not coming from you, then the FDA doesn't like it.

Tapley Holland:

So that leaves you with this specifically, you can go into that, but it says things from your blood, your bone marrow, those are well-established. There are well understood. The risks are well understood and the region. And so the FDA doesn't really regulate those. However, these they're starting to enforce enforce clinics to stop doing that. Stop, stop promoting that. If you, if you're doing this cells from the patient's own body, do that.

Caspar Szulc:

So it's got a thumbs up there.

Tapley Holland:

It's got thumbs up. Yeah.

Caspar Szulc:

That's always good to know. That's always good to know, because there's so much out there that, that doesn't yet have a thumbs up. And people are always wondering, right. Once we get started with this will be taken away from us. And a lot of what's happened in integrative and alternative medicine is that you're seeing a lot of great options start to be taken off the plate and not allowed.

Caspar Szulc:

So it's really wonderful to hear that there are these advances happening and they're natural advances, really in many ways. I mean, they're not chemically induced or they don't have many side effects and they're getting the films up, which is what you want to see. You want to see medicine advance. And this is what I think, you know, the direction it has to go is things like TruDose.

Tapley Holland:

I think that if I think that we're very lucky to have to be in the time I understand the whole world and what it is now, but I think that we're lucky to have I guess the governmental bodies that recognize that say, we recognize patients are having to go overseas and do these things. It shouldn't be that way. We have great physicians here. We have great technology here. Just, we don't want you doing this.

Tapley Holland:

If you're doing this, we want you to, you know, explore the complete understanding of what, of what these cells can do from our own body. TruDose unlocks that potential. Because if you don't understand it, what dose does, what thing we will never understand the fault potential of what these cells can do. So the ability for TruDose to say, Hey, this dose, I know that vision gets better. This dose. I know that, you know that yeah, speech improves at this dose. I know that, you know, Dyslexia, you can read better. And that's what we're figuring out. You know, I'm glad you brought that up because after that's true. Sure. I'd like to say this, but last, once we started seeing all the things with the IV therapy, we quickly said we better, you know, patent the method and how we're doing this. So you know, to, for two reasons, number one, we want to make sure that, that, that, that the actual discovery is, is I want to make sure it's protected. And then the last thing is, I want to make sure that facilities are doing it, that, that they have that they are our our honored sites, if you will, that they have exclusivity to that technology.

Caspar Szulc:

Yeah. Yeah, no, I'm so glad that you had this dream Tapley, and I'm glad you saw it through, cause we're thrilled about this. Other people should be really thrilled about this as well. And I'm hoping that this just continues on this route and I hope you keep doing what you're doing and help people out. So thank you so much for being on the show.

Tapley Holland:

Thank you for having me. Yeah. I'm, I'm so glad to have you guys on board.

Caspar Szulc:

Tapley made a great case for what, if everything we need to heal is already within us. And we just need to help catalyze our ability to use it effectively. Our bodies are these incredible healers, and rather than going outside of them with chemicals and new lab discoveries, maybe it's time we go deeper inside that approach combined with the advanced technology like AI may just be where the future of medicine needs to go science and nature or natural healing. If you want to call it that doesn't have to be an either or scenario and bridging the gap may just be the solution to our health problems. Our clinic, the New York Center for Innovative Medicine is excited to be one of the first to offer TruDose PRP. And we'll be sure to let you know the results as they come in. This isn't a magic pill, but it seems to be a really great tool along with many others that are pushing the boundaries of medicine until next time, stay healthy, happy, and continue to write your own healing story.