Exosomes: What You Need to Know Transcript

(Transcripts are generated by AI and may contain errors)

Podcast Introduction and Regenerative Medicine Overview

Hey there, welcome to the Recharged Biomedical Podcast. I'm Dr. Edward Park, and if you're curious about regenerative medicine, you've come to the right place.

We're diving into the latest breakthroughs in telomerase activation, stem cell exosomes, and all the cutting edge science that's shaping the future of healing and longevity.

Let's get started. Hi everybody, this is Dr. Ed Park, the host of the Recharged Biomedical Podcast, and today I thought we would just improvise a lecture of frequently asked questions.

I just finished an eight week improv comedy course, which was great. I won't burden you with my attempts at humor. If it comes in, I will apologize in advance.

The first question I get a lot is going to be frequently asked questions is what is an exosome?

What Exosomes Are and How They Signal Healing

So exosomes are how cells talk to each other. That's all plants and animals. And interestingly, although they observed it for nearly 100 years, they thought it was poop until about 20 years ago.

They said, what if we strain the broth that these cells are growing in and melt the capsules of these invisible 100 nanometer spheres? and they found that there was purpose there.

There were notes, and these notes, they tend to be microRNA. So microRNA is something that, bear with me, is a little complicated, but basically in your cells, some cells throughout your body, They're kind of in an adult resting phase.

So if you block the blockers of their de-differentiation, then they can de-differentiate. So a lot of these microRNAs block the programs that keep you mature and normal, and they make those local cells act young and robust and regenerate like they're in utero.

And that can look like regeneration of joints, nerves, blood vessels. So it could have some really potent eutaining effects, if you will. Another question you might ask, well, how is that different from stem cells?

Well, stem cells are attracted to areas of inflammation. So if you get a paper cut or get stabbed, your body will be inflamed and it'll send exosomes from the stem cells.

But really, the stem cells, whether you get them from yourself or from another person, their actions are mediated by exosomes. So the exosomes are the songs of healing.

Your stem cell will go there, release exosomes, and it'll teach the local knee cartilage or the finger laceration to heal faster. So the local stem cells will act primitive and immature and grow.

All right. So the question is, well, what's the practical difference? Well, the practical difference is that stem cells are usually more costly. I just did a phone call with a consultant who has a machine, but very few people have a machine to test cell viability.

So when you thaw out a vial of someone's stem cells, you don't know how good the product is or how viable or even if they're alive.

Exosomes vs Stem Cells

So it tends to be quite a bit more expensive. In chondrodistinction, exosomes are not alive. They don't have mitochondria cell machinery, pathways. They're very tiny and they're literally invisible.

So when I melt a vial, it should be clear. If it's cloudy, I know something is above 200 nanometers, which is the limit of light detection. So the reason we don't use stem cells is because, number one, they will be rejected by your immune system because they have self-identifying antigens.

And the youngest and most potent ones are from a newborn placenta, which is what we use, single donor placenta. So why not just get the effective message across?

It's kind of like you can play a song by the Rolling Stones or you can hire the remaining Rolling Stones to come to you. It's more expensive. They might not even play as well as they used to.

So you might as well just get the songs from a newborn baby placenta because you're healing in my case, you know, almost 59. My punch that's packed inside the X-Somes is weaker.

All right, so a question might be, well, what about PRP? Well, PRP is even further up the chain. So PRP, they take out your blood, and we did a great episode with Dr.

Gelber on the Recharged by My Podcast explaining this. It causes inflammation, which brings in your stem cells, your 59-year-old stem cells, and then it releases your 59-year-old exosomes.

So it can work. I just had a recent patient who had a terrible intertrochanteric band or the side of the thigh pain as she did PRP and it made it worse for four weeks and now it's getting better after an exosome shot.

So it's a Faustian bargain when you trigger intentional inflammation, it usually goes well, it can go poorly as well. And the other question you might ask, well, what about steroids?

Well, steroids, when I took the class seven, eight years ago to train in ultrasound guided injections, the Marine Corps doctor said, you got to be careful with tennis elbow.

As we know, some cases of steroid ejection will cause atrophy and rupture. Why is that?

PRP and Steroid Injections Compared

Well, because steroids cause a decreased inflammation, yes, but they also cause atrophy of these organs, including, but not limited to the ligaments, tendons, and the cartilage.

So this is well known, even though they're paid for, they are not FDA approved, nor is there evidence showing that they will help. Steroids have their place in acute inflammatory conditions like gout, pseudo-gout, rheumatoid arthritis.

But again, it's a Faustian bargain because in the long run, it will lead to more disc problems in the back, more knee cartilage erosion, so not recommended.

But in the old days, that's all we had before the orthobiologic revolution. And so that's the problem. You might ask, well, how do I know this is going to work?

Well, you really don't. As in anything in life, it's an asymmetric risk. I would say certain areas are more likely to work. The older you are, the more damaged it is, the less likely.

But you have to define your end point. I mean, an improvement in function, a decrease in pain. And even radiographic improvements are all great, but you have to be realistic.

Like you can't refurbish a house in a day. So I always tell people if it gets better, then consider repeating it in two or three months. We can still see effects up to two or three months.

And if it doesn't get better or gets worse, which I rarely ever see, then just bail and forget the exosomes. You might ask how much does it cost? Well, it depends really on how many vials I need to thaw out for you, because they're very expensive.

That is the main part of the procedure. I, unlike a lot of other doctors, don't charge more for more areas. Although I think if you're doing more than five areas, it's too much homework for the body.

And so probably limited to that. So there's one milliliter and five milliliter products, and there's one triple concentrated, five triple concentrated.

It's basically a multiplier of how many vials I need to bring to treat you. So just FYI, that could look like 500 to like 6,000 and up. But if you're talking about stem cells, you're in the ballpark of five to 10,000 usually.

If you're talking about these mu cells, which they allege through good research out of Japan, mu cells are de-differentiated stem cells that can become tissue.

And that was the misunderstanding that we held for years.

Treatment Expectations, Cost, and Mu Cells

In fact, in my first book, I thought that mesenchymal stem cells went to the sites and then grafted and differentiated into muscle tissue because we know they can do that in vitro or in the glass in the petri dish and indeed it's one of the very interesting things I learned at the Hong Kong International Stem Cell Research Conference.

They have booths and vendors that have cookbook recipes on how to de-differentiate any cell and then make it into any cell type. It's really quite remarkable.

Indeed, you can find my blog about curing diabetes. They have a brilliant doctor out of Peking University who cured type 1 diabetes by de-differentiating your cell and doing the steps to make it a pancreatic islet cell and implant it in your rectus sheath.

And I think actually in Germany, they're commercializing this. But it's basically at the time last year, they were seven for seven for cures, which is astounding.

So yeah, cell differentiation, mu cells, they charge 30 to 40,000, I think. I think it's way too much. And the three or four people I've talked to didn't have dramatically good results at all.

So I would say that's probably not ready for prime time. A question I have, well, how do I learn more? You should purchase my book, which is also audio book, Existone Songs of Healing.

You can go on my website and I go over the different treatment areas. If you're a doctor, you can take my online training course and the full tuition of which is credited back as purchase credit for exosomes.

Yeah. And then the Recharge Bible Medical podcast and my YouTube channel, DRPARK. You can like and subscribe and we have a lot of content there. So another question is, well, my friend did this.

My other doctor recommended that. What's the deal? Why are there so many brands? Well, I'll tell you this, it's not hard to make an exosome. All you gotta do is have a stem cell and then you filter out what's in its broth every couple days.

The main thing, the reason why they're so expensive is the quality control, right? Because you're only as good as your worst batch. A patient told me two years ago that in Japan, there were some fatalities from a contaminated

batch and now the notion of exosomes is quite looked down upon there.

So that can happen. And so for my practice for the last seven, eight years, it's really only been one brand. And I would say estimate there's been 30 brands, half of them have gone out of business or pivoted.

I would say that quality control is a function of your supporting cast. So the brand I use has six PhDs, 40 employees, multiple redundant quality control.

They have eight giant cryogenic freezers. They keep track of their lots and the quality in perpetuity. So if there's ever a problem, which is hard to imagine there would be because of the sterility conditions, but they definitely are on top of it.

Learning More and Brand Quality Control

The conversation I just got off with from the stem cell advisor, He said he visited a guy who I think I know he didn't want to mention his name. And sometimes these labs are in kitchenettes and strip malls next to check cashing places and they are far from sterile.

And it's really just a money grab. So really for me, you know, even if one patient gets hurt. That's one too many. Unfortunately, if you find out a lot of the successful brands in the market are actually white label, which means they have no control over the manufacturer, what they're doing.

And so they have to trust the manufacturer and they just are marketing firms. So anyway, without naming names or alienating people, that's my impression.

It's better to have somebody that has scale and high levels of quality control. All right. So you might ask, well, how do I get a treatment? Why don't you start by getting a consultation?

So do a little due diligence around reading the book, listening to the book, watching some videos. And then you can always go to our website www.rechargebiomedical.com slash contact hyphen us.

And there you can book a complimentary 20 minute zoom console where we really. Go through all your medical history and how eczems may help you. And it's a super efficient thing.

It's very low pressure and it's often quite enjoyable to get to know each other and, and find out how we can help if at all. Last week, I released a video of my mom who is 88 and she drives several hundred miles a week back and forth to the casino where she loves her slots.

And I think that her lifestyle as an independent 88-year-old woman is really a testament to how well she's doing. Does she have medical problems? Sure.

She has some heart arrhythmia. It used to be high blood pressure, now it's low after 40 exosome shots. But so far she's very independent, very sharp, and very full of life.

So it's something that I think can help. in a way, like a panacea. And I think more is more. And so if you'd like to address that in terms of health and wellbeing, get in touch with me as well.

Because the only patients that I've seen, other than mom and two others that we talked about last week, they really have had transformations in their vascular system, their hormones, resumption of a premature menopause out of menopause, erectile dysfunction, hair repigmentation, I think people really, if you tell them, hey, give me this amount of money and in a year you'll look and function eight years younger, they do it.

But people are. quite complacent by nature. And so they tend to think, well, I'm feeling good.

How to Get a Consultation and Patient Examples

Why should I spend more money? So they don't see the big picture. And the people with the deep pockets, you know, some of them also don't want to take that point because they're like, well, I should save my money and buy more real estate.

But in the grand scheme of things, I have a very dear friend who is in the struggle with stage four cancer. And I think that nothing really is more important than your health.

And you realize that all too late. So anyway, this was my improvised sort of lecture on exosomes. I know it may come off as a bit salesy. It was not my intent.

I am a believer. I think that exosomes can help a lot. They've helped me. They've helped hundreds of my patients in thousands of encounters. And so if you're at all curious about this, plenty of content on DARK65 YouTube.

Join my sub stack at d-r-e-d-p-a-r-k, and we set out private emails. And we also have monthly Ask Anything webinars. Yeah, I think that's kind of what I wanted to say.

Oh, finally, are they safe? Yes, I think they're very safe. I've only had one serious complication, which could have happened with steroids or hyaluronic acid that was a knee infection.

you know, out of probably seven, 800 knees. I don't, maybe I'm not sure, but I think they're very safe. They're very anti-inflammatory. And again, they can't be rejected because there's no self-adjective.

So for all intents and purposes, you start healing for a time like a newborn baby. So what could be better than that? All right, well, that's about it.

If you have any other questions that weren't addressed, I'm sure you could contact me at rechargebiomedical.com slash contact hyphen us and there's a form for either booking an appointment or for asking me a question.

And we usually get back to pretty quickly. I'm Dr. Ed Park. I'll see you in the next episode of the Retired Biomedical Podcast. I'll be attending a conference next week and I hope to find other great guests.

If you haven't been watching, you've been missing out. We've done psychedelic assisted drug therapy. We've done EMF. poisoning and control mitigation.

We've done mold infections. We've done treatment of autism. A lot of the sort of fringe areas that these experts have brought to you through our Recharged Biomedical Podcast, I think it's a great service.

Safety, Ethics, and Closing Thoughts

And unfortunately, as most patients eventually come to realize, the doctors don't really have the bandwidth or the interest to dig a deep dive into your case, always adding prescriptions and counting the days to retirement.

So you have to be the quarterback of your own healthcare. And part of that is just learning some of these fringe things and keeping them in your pocket.

I wanted to fly out to Hawaii. My friend is not contacting me, but. You know, there's a couple of really interesting fringe cancer treatments. So as with everything, the advanced guard, the extremes, that's where the progress is.

And there's a lot of resistance to those treatments. I hope that exosomes are more mainstream. I know the fact that we interviewed Dr. Gelber and he's a believer as an orthopedic surgeon.

I know one of my patients. Her ex-husband is orthopedic surgeon. They say they talk about exosomes all the time. Indeed, after going to two exosome international conferences, one stem cell conference, there is no disagreement that this is not a fringe startup out of Silicon Valley or whatever, central Linux.

This is basic science and there's no reason why it wouldn't work. When I go to these conferences, they're very hostile towards me because they're like, well, what, what right do you have to do this?

And that's very legitimate. I, again, I make it a point not to overcharge people like these mu cells. And I make it a point to treat multiple areas as an added value.

And I never over promise and we always disclose fully it's not FDA approved or standard of care. So we do what we can to be ethical. But again, no one will argue that it doesn't work.

They will argue that the quality control isn't there, the scientific proof isn't there, except in animals. But again, I'm a believer and I think people do have the right to try what they can to mitigate and to improve their health.

So, all right. I think that's enough. I'll see you in the next episode of the Recharge Biomedical Podcast. And thank you for liking and subscribing. I've spent years studying how cells age and why we age and about cell communication.

Exosomes are now changing the way we understand cell communication and providing an opportunity for us to reverse some of these problems. Pick up a copy of Exosomes, Songs of Healing, and in simple English, I explain how this is working and why this is the future of medicine.

go to www.rechargebiomedical.com, subscribe to my sub stack at d-r-e-d-p-a-r-k, and watch my YouTube channel at drpark65. Thanks so much. Thanks for tuning into the Recharge Biomedical Podcast.

If today's episode got you thinking, you'll love my book, Exosomes, Songs of Healing. It's packed with cool analogies, full color illustrations, and all the science you'll need to understand how exosomes are changing the game in aging and regenerative medicine.

You can grab it in paperback, ebook, or audiobook, whatever works for you. Now head over to www.rechargebiomechanical.com to check it out. And don't forget to like and subscribe so you never miss another episode.

See you next time.