# Lasers, PRP, or Exosomes? A Doctor Explains Facial Rejuvenation Transcript

(Transcripts are generated by AI and may contain errors)

## Podcast Intro and Regenerative Medicine Overview

Hey there, welcome to the Recharged Biomedical Podcast. I'm Dr. Edward Park. 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 and today we're doing a lecture about facial rejuvenation, which is something that obviously everyone can benefit from.

The first slide shows me 20 years ago, 26 years, ago I was very obese. I started taking TA-65 and I shed the visceral fat rather quickly. But I don't think I looked that young.

Occasionally I will get carted for alcohol, which I do not understand. Here is my picture from a year and a half ago. Obviously, good favorable lighting.

If I had unlimited resources, I would probably do micro-nataling with exosomes more often. So this is from my book, Telomere Tymons and the Telomeric.

And it just shows that telomeres shortening is at the heart of all diseases. It's one disease, it affects all cells, especially stem cells.

## Facial Rejuvenation and Aging Background

I believe that taking TA-65 has helped to slow that process. When we look into what aging is, here's a list of premature aging syndromes. And what you can't really read is the phenotype of osteoporosis, wrinkled skin, hair loss, and depigmentation.

These are all very typical of these premature aging syndromes. And the gal to my side here has one of this and she's looking old, even though she is probably only seven years old.

And you can get this dyskeratosis congenita from any of these three components above me. The reverse transcriptase enzyme, which prints out new telomeres, Which are the ends of chromosomes that protect them from damage.

Or the Turk template or the dyskaren key to the lock. So everyone wants to look their best. They want to like younger. We've known about Botox for decades, fillers as well.

These are temporary solutions to a ongoing problem. Of course we have the crow's feet, the frown lines, glabella area. marionette lines this is all because of loss of elasticity thinning of the skin the sunken eyes is loss at the adipose fat pad then we have degradation of extracellular matrix the stuff even in between the cells like hyaluronic acid This can be caused by glycation.

People say that inflammatory diets worsen it, which I probably have too much sugar in my diet. Of course, UV, A and B, cell aging and stem cell attrition and damage, epigenetic changes, these are all constant work.

This graph shows that people spend a lot of money to try and look younger. And it doesn't actually include it's the songs, which is also a billion dollar market.

And for good reason. I want to take a detour to my most famous case, this guy Richard, who documented over the

course of two weeks his improvement in everything.

And he basically had a leaky gut, and it was causing inflammation. After exosome treatment, he must have sealed his gut. So this lining here was letting food particles into his bloodstream, causing an allergic reaction.

I think the most prominent thing is two weeks later, this 49-year-old looked younger because you see all the inflammation, swelling, the eczema, even the veins in his legs, spider veins went away, which was quite remarkable.

So inflammation is the result and cause of aging, we might say. But ironically, Kim Kardashian is putting her blood on her face, her PRP, and getting microneedled.

## Inflammation, Exosomes, and Skin Repair

So PRP got popular about 15 years ago. They take your blood, they spin it, and they take this platelet-rich fraction and then they microneedle it into your face.

So how can inflammation reverse aging? Well, we see the curve from my book, Exosomes, Salms, & Healing, And it shows that initially when you get an injury, there's inflammation, which brings in your mesenchymal stem cells, They secrete exosome and shut down the inflammation and rebuild the tissue.

So the FDA has approved microneedling for scar or facial wrinkles, and that's for people 22 or older. And that means they think it's safe and effective.

So even without exosomes or any biologics, just the fact of damaging causing inflammation will in most cases improve the appearance and that's because of the natural human response to inflammation that is stem cell recruitment and secretion of exosomes.

Now what are we doing with laser and radiofrequency? Now they have these Morpheus micro-needling with radio frequency. We're just causing tissue damage by and large.

causing an injury, a burn, and these are some of the targets of a different wave race. For many years, I practiced injections and also lasers. I had an ND YAG 1064, had a KTP, an Erbian, which was great for resurfacing as well.

So again, in the context of exosomes, they could be such a great adjunct. After you do your ablative procedure, you put exostomes on and it skips this whole hemostasis inflammation goes right to proliferation and remodeling.

That's how exocells work. They change the way that the T cells are behaving to a more regenerative mode. So it's good to be aware of the Fitzpatrick scale, type 1 to 6, according to someone's darkness or melanin content.

If you are lighter, it means your ancestors evolved in vitamin D poor areas, and so you need more vitamin d. Of course, when you have more melanine, there is the risk of post-methylalanine hyperpigmentation.

As you see, this woman, probably South Asian, has some streaks from laser treatments. And that's because the inflammation can cause post-inflammatory hyperpigmentation.

So you have to be cognizant in that. Three plus four, five, six, the darker skinned people. When I was doing laser, I would prevent this. I found some obscure paper.

It was from a Southeast Journal. Surprisingly, a lot of my dermatological patients They kind of said, oh, I got post-inflammatory hyperpigmentation. And so the germs don't really know about this, but we would mix.

I would compound a bleaching cream, which prevents melanin synthesis and a steroid and start that around day 10. and that would obviate or preclude the post inflammatory hyper pigmentation, even after very inflammatory laser treatments.

So what are we doing with exosomes? Well, they're anti-inflammatory. They regenerate skin, vasculature, and elasticity by leveraging the body's own natural systems, but without the inflammation.

Notice that when you do PRP, it's how you don't take Advil or Motrin for a week because they want the information. We do not want information, we don' want to take that risk or that bargain.

So possible applications would be skin burns. This patient to the left had a horrific burns on her face and we gave her weekly injections and it cleared up very, very nicely.

Eczema, which is something I've had lifelong, acne. We also will see a treatment of my son who had acne as a teenager. But it's a great adjunct anytime you're doing laser or, you know, any kind of healing procedure on the face.

I've taken up golf recently again, and you see these punch screens, they put holes in the green. It's kind of the same process. They want to bring air in and the damage to the greens brings in healing potential.

So what we're really doing with the micro-kneeling is causing holes, damage, physical damage. And we are hoping that the inflammation again and then the proliferation comes in.

Fibroblasts, mosaical stem cells, exosomes, it's all very, very natural. When we look at the cross-section of the skin, we have the outer sort of almost water-grouped layer.

There are water channels, but we want to make holes to seed the other skin. So we need to get through the dry dead skin layer, the stratum corneum, and then under that is the epidermis and the dermis.

## Microneedling Technique and Skin Prep

Stem cells are throughout, nerves are through out, largely in the germopapillae. That's where a lot of stem cells reside. Now, everything is a practice of medicine.

It's not a mastering of Medicine. And when I first started out, I was using a lot of benzocaine, lidocane, tetrocane or BLT. it's a common formula, 20% benzocate, 8-lido-8-tetra.

If something that you have to keep refrigerated in some cases, sometimes they can make it so you don't have refrigerate it. And you can use an occlusion app like cellophane, 20 to 30 minutes is the max.

If you put it on longer, it will cause too much absorption. You'll get a headache. It's not great. But it does work if you're going to go deep. And what do we define as deep?

Well, if your going do fractional laser or something like even RF, Morpheus, these things hurt a lot. Now if we're doing deep scar revision CO2, which I don't love, I love erbium better because it's more adjustable.

But you can look at the depth, right? So the dermis is about a millimeter depth depending on the region. And it's going to hurt. So you're probably going need BLT.

These are the different depths. The commonly used machines, we have a little radial dial that you could dial from 0 to 2.5 millimeters depth. You have pretty precise control over that.

Skin cleansing is an interesting thing. Of course, you want the person to cleanse their face, take off their makeup. Some people use alcohol, other people don't like it, it smells, kind of stings.

It can sting, evaporates quickly, but it can be drying and irritating to the skin. One really good option, which is less toxic, is hypochlorous acid, Skinsmart or Griotek, non-toxic, and you don't need to rinse it, it'll evaporate off.

I prefer Betadine because I carry Betadyne all the time, but I also use a sterile normal saline to wipe it off

afterwards because you want the Betadiene.

staining the skin, but that is very, very broad-spectrum antimicrobial. The treatment, you'll see at the end, was done with chlorhexazine at first, then I encouraged my friend and nurse to use Betadine.

Chlorhexyzine is okay. It is toxic if it gets in the eyes, so that's not great, or the ears. You can dilute it all the way down to 0.05. Hypocleans is a commonly used one, again, we used to this in surgical prep.

but I don't like it near the eyes. Witch hazel is something that Dr. Martin recommended, but it's not that antimicrobial. Probably better after treatment.

But keep in mind that this is not like a sterile procedure. We're not really, you know, it's not going into the abdominal cavity or joint space, God forbid.

The skin, including the scalp, is very well vascularized and very resistant to infections. Now, that said, if somebody has an active perpetic lesion, I would delay the treatment for another day because exosomes do shift the phenotype away from antibody production into regeneration.

So this is the one I'm currently using. They have a Dr. Pen MAS. I used to use seven, but the cord is a drag, the Cordless is easier. they have nine, they had a ten, They're all running around $100. And the cartridges are only two or three bucks each.

The good thing is you can adjust the frequency and the depth quite easily. So these are obviously sterile single-use things. and I will use a urine cup.

These are also very good. Anything that's sterile, we want to keep it as clean as possible. The cosmetic brush is a great thing. It's not strictly steriled, of course.

You could do that. But it's very great for application. it feels nice going on. And that is what I use. Alright, so when I was last year in Cancun giving lectures on exit songs, I met this guy, Scott Martin, who reps for another company.

And that's me singing Mariachi, but he gave a really interesting lecture about why not to use BLT and I did shift my practice. So if I ever update the online training, I will include that because the BLT is cumbersome.

Again, there's some systemic absorption, but most importantly, it's acidic and it can kind of degrade the exosomes, which is what we want. So I think of it like a creme brulee, right?

So you have that charred, very thin layer on top. We're just trying to get more channels than what exists. The water channels are there, but we're trying make thousands of little holes so that the exosomes can be put into the epidermis, perhaps even the dermis.

And what you'll come to find is that if you do less than 0.5 millimeters, yeah, there are nerves, it's really quite painless. With the exception of maybe an elderly person on the forehead, you might hurt a little bit, and you dial it back to 0,3. or under the eyes where it's very thin.

But in general, if you're keeping it under 0.5 millimeters, you don't need anesthesia and you are making the holes for the exosomes to go into. This is years ago, what six years, ago my son was having nodulocystic acne and it was over a year.

He was trying to do oriental medicine, other things, lights didn't really help. So antibiotics didn' help, benzoyl peroxide, alkyl hydroxy acid, all this stuff.

## Treatment Demo and Results

It's just part of being a teenager and having, hypertrophic Sabatia squats right so we decide to try micro needling

we microneedle put some exosomes in there and the nodularity decrease the amount of inflammation decrease nine months later he was.

Much much better after just two treatments earlier. This is one of my favorite patients. She, she actually flew out the next day to have her son treated.

He had a terrible genetic accident, but Allegra had 11 kids, a former investment banker, wonderful person. Even had multiple sclerosis, which she somehow.

flew to eastern europe and got treated with a interesting jugular venous stent but all that aside she said hey can you do anything to help my parents and then she sent me a bunch of pictures i mean it's better light and makeup but at 49 with 11 kids Jess stated she had signs of aging and she was happy.

She did do the five mil higher priced version, but that was after one treatment in one month. Just last year, our good friend Bob, his sister said, Hey, I got a spider bite two weeks ago.

But, um, they were talking skin graft. She was hospitalized. It was nasty. So when I saw her on the day of treatment, this is what it looked like. Clearly necrotic.

I just put a tiny bit of Luxir at the periphery and my goodness, six days later, it's like nothing had happened. so it must have rebascularized the area and shut down the necrosis, which is remarkable.

So what are our options? You know, we have the baby in the bath water. So a lot of the products out there are lyophilized, let's say freeze-dried. Like Benev, it comes from obese Korean men.

They do liposuction and they're maybe not stem cells. There may be just adipocytes, maybe some rare stem cell in there. And they collect the exosomes and then they freeze dry them.

Does that work? Yeah, probably it helps. The micro-needing itself is helpful, but the This is like a billion, multi-billion dollar company, and they just have good marketing and market share.

We use Luxir. Luxier, of course, is micro-filtered, nanofiltered really, size exclusion and inclusion. So what does that mean? When you grow a stem cell, it secretes a bunch of stuff, even like the waste products, the products of apoptosis are in there.

Some people allege that it's better to have all the condition media, all of the products. I don't necessarily believe that. If we're looking for pure exosomes, we are looking at size, inclusion and exclusion.

So if you're just wanting a product for the face, the Chiara is not size inclusion. Everything is smaller. All the little stuff in the stew and the broth is in there.

If you do size inclusion, it's much more expensive, that's a pure product between 40 and 160 nanometers, let's say. That's something you can give IV, even if I use it intrathecally in the joints, ultra-pure size-inclusion.

But if you're just allowing all the small stuff, molecules, little debris, That is a Kiara product. And the Veev product is the legacy product, which has amino acids, and some of the sulfur moiety smell like rotten eggs, so they put rose water.

Never use Veev internally, only topically. So that's a good price point right there with the banana. But if you want to do cheaper, like a series, a package of treatments once a month for three months, Kiara may be the way to go.

You can even dilute it and you can see your price points there for one to five, six to 14 and 15 plus. And you could purchase that directly through us and the chips the next day too.

So that's really a lot of the products on the market are maybe not size inclusion filter. So they are conditioning

media and people say it's better. I don't necessarily believe that.

When we do microneedling, I have a separate consent, which you can download from the online course. Again, they'll wash your face and then we will clean with Betadine.

And then I use sterile normal saline to wash the Betadyne off because it can kind of stain. You don't necessarily have to have 100% thaw because as you're doing it, it will thw.

But pour into the sterile cup and be careful that the weight of the cosmetic brush doesn't tilt the cup. That's a disaster. Usually won't. I use steril ultrasound gel to glide.

You could argue that clogs the pores, but you'll see it in the video demo that you can wipe it off and you still have holes there. Again the new technique, the crème brûlée technique is only 0.3 to 0,5 depth and it just feels like a cat licking you.

Really not painful at all. We do section by section. You can see this is the view of the provider. I'll usually start on the forehead, one side and then make my holes clean with the sterile gauze and apply the excess.

So I'm going to do the other side of that forehead and we'll do that entire cheek. we might need to adjust by the side the eyes or under the eye where it's thinner because it'll hurt more.

And then we'll do the application. I'll be the other cheek and then I do a center of the face, nose, lips, chin. And if we're doing, if you have enough product, we do that.

This is an upside down picture of me I took today. You know, I'm 59, and I don't have great skin, eczema, a lot of inflammation, my diet, lifestyle, but I anticipate it'll get better even in the weeks to come.

So this is something you can do. Microneedling is FDA approved with or without exosomes. That's a different story. There are lyophilized brands, but they come out to be the same price really as Chiara or Veve.

And so I tend to, you know, like to splurge and use the five nil Luxir and that is a good product.

## Q&A, Course Promotion, and Closing Remarks

If you are interested in doing this, you can keep it on the download. Just spend a hundred bucks to get a doctor pen and then order X-Somes. I think you might like it.

Most people do. We're going to watch a video demo of my last week's treatment. And if you're interested purchasing, You can go to rechargephilemaple.com slash masterclass where we described the course.

It's online, 15 hours. we just added an autism treatment modules. You cannot download all of our forms for patient intake, pre and post consenting. There's one sheet for your medical assistant to prep all the things and find your steps we take in the physical exam and you can buy excess homes and watch video demonstrations there as well.

When you purchase the course you get a never-expiring credit which we will give you back as excess home purchases. And you are also on our email list for learning about these monthly webinars.

So let's open it up to questions and I'm going to show you the video of my treatment last week. If I can find it. Let's see if I could find. This is my face.

It's kind of ragged from a lot of sun exposure, eczema, inflammatory diet. She's just prepping the skin with a little beta dye. You could wipe it off with normal saline if you want.

Do you have normal Saline? You need a normal Sally? Just to wipe that off. Okay. So nurse Casey has applied the beta-diagnosis, just washing it with a little normal-saline.

And then she's going to apply gel to help it glide. and then wipe the gel off and painted the exosomes with a cosmetic brush. Because we don't go deeper than 0.5, it doesn't hurt.

There's no nerve endings, so we do not need to go use anesthesia, no benzocaine, lidocain, tetrocaine in this technique. Okay, so just do like gel Mm-hmm.

Okay and then microneedle and paint. But you have to wipe off the gel. A little gel Just a little yeah, okay. Then you mean the stamp, right? No stamp just paint It doesn't hurt because it's only 0.4 millimeters.

Wipe off the gel with the dry sterile one. Okay. And then spray it. That's it? Painting, yeah. I feel that a little bit in the under eye section just because the skin is thinner, but it still doesn't hurt.

And notice it's not bleeding. So this technique, we're just penetrating the stratum corneum, just enough to plant the seeds, the exosomes. So we're all finished up, even the neck.

Just getting all five CCs of the beautiful Luxier Pure Exosomes. And hopefully it'll tighten and brighten everything up. Thanks, Stars Casey. Well done.

Okay. You can see right after, there's really not much redness or irritation. So painless, quick procedure. Overall, I expect the results to be good, as they usually are.

That's it. Microneedling with exosomes. All right. I guess we answered all the questions. As Denise said, we have video demos of shoulders, knees, even epidural.

That IV, that's pretty easy to do, I hope. Nasal is our most popular treatment, and we've been doing that a lot for neuroinflammation. Okay. That's pretty much it.

Everyone is completely satisfied. No questions. Alrighty. Well, this is Dr. Ed Park completing a lecture on facial rejuvenation. And I think the sort of light motif I want to get into everyone is that you can't really stop aging.

But transiently, you could use inflammation, micro-needling, exosomes to kind of mitigate. And I've been using TA65. I believe that's been helpful. It can read inches away like this because it kept my lens off.

So these are little hacks that we have. Again, I don't think I'll be carded for alcohol. for much longer, but I'm enjoying it while it's lasting. So anyway, if you have any questions, you can contact me offline, Dr.

Park at rechargebiomechanical.com. If you like this content, please like and subscribe and every month we'll do a different sort of provider webinar for you to learn.

Thanks everybody for attending and appreciate you. We'll see you next time. Many clinicians are getting interested in exosome therapy and they hesitate for good reason.

Questions like, does this work? What forms do I need? How much should I charge? how do i stay out of trouble? All these questions are addressed in my online course.

That's why I created it to help you get started. The online Course is your permanent turnkey resource to get start either treating yourself, friends and family or to expand your practice and help more people as well as increase your revenue.

Thanks for tuning into the Recharged 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 need to understand how exosome 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.rechargedbiomedical.com to check it out. And don't forget to like and subscribe so you never miss another

episode.

See you next time.