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The following is an edited transcript of the *Journal Club with Pearls & Marketing* (JCPM) of January 23, 2024, with Charles Runels, MD.

The video of this live journal club can be seen here ←

Topics Covered

- Leonardo da Vinci said, "I want to do miracles." Do you? Then, learn how to employ telocytes.
- Where can platelet-poor plasma outperform platelet-rich plasma?
- The history of the Vampire Facelift ® procedure.
- Using PRP to treat vesicovaginal fistula.
- Marketing the Vampire Facelift® and the Vampire Facial® Procedures: a Suggested Message
- PRP or PRF—Which is Better?



Charles Runels, MD Author, researcher, and inventor of the Vampire Facelift®, Orchid Shot® (O-Shot®), Priapus Shot® (P-Shot®), Priapus Toxin®, Vampire Breast Lift®, and Vampire Wing Lift® procedures.

Telocytes Facilitate Miracles

Welcome to The Journal Club. I have three papers that you will find

interesting today. And, of course, we'll always have an open mic for those of you who may have questions about our procedures.

We'll start with this amazing review article about the cellular mechanisms involved with platelet-rich plasma. It's the best one I've seen lately. It's open source and goes over what we're doing when we use platelet-rich plasma as a tool.¹

The paper does a tight but thorough review of how the growth factors are working, how the clot is working. Those of you who haven't read about how PRP works lately will, I think, find it enlightening. It

Charles Runels, MD

¹ Manole et al., "Platelet-Rich Plasma in Dermatology."

also reviews megakaryocytes, and how platelets are formed, and where the growth factors come from and some nice electron microscopy pictures.

However, one idea in the paper was new to me: they discuss how telocytes contribute to neovascularization and new collagen production. I put the paper in the chat box. I recommend you print it out and read it. You will be empowered and encouraged in your practice of regenerative cellular medicine strategies.

When Can Platelet-Poor Plasma Outperform Platelet-Rich Plasma?

The next article more practically affects how you treat your patients; it discusses the effects of PRP versus PPP (platelet-rich versus platelet-poor plasma).²

They used the VISIA system³ for objective measurements; then ten females were assigned to two groups, and the injector was blinded.

They used Regen tubes,⁴ and then they extracted the platelet-poor plasma and injected one side, platelet-rich plasma, with the other side. The examiner was blinded to which was which.

Three sessions, a month apart; then, they looked a month after the last. So T0 was the first injection, T1 was the second injection, T2 was the third injection, T3 was a month after the last injection, and T4 was three months after the last injection.

Surprisingly, *platelet-poor plasma was better for some indications than platelet-rich*. So, for wrinkles, platelet-poor plasma was better at three months than platelet-rich. For brown spots, the platelet-poor was not so good, and for the red areas.

For the UV wrinkles, well, part of their theory was an increase in some of the brown spots because this was done as spring was coming, the season changed, and people went out in the sun.

Probably six months to a year ago, we looked at a paper here where they showed that if you inject platelet-rich plasma and you get in the sun, the UV light has less of an aging effect, and the skin seems

² Tsai et al., "Platelet-Rich Plasma Versus Platelet-Poor Plasma for Treating Facial Photoaging."

³ "VISIA Skin Analysis | Canfield Scientific."

^₄ "Home."

Charles Runels, MD

to be protected.⁵ So, brown spots after platelet-poor plasma went up; platelet-rich plasma decreased it, but platelet-poor plasma did not.

They both showed a decrease in wrinkles (PPP did better). The platelet-rich plasma was better at decreasing the changes from the sunlight.

Platelet-poor plasma is a byproduct of platelet-rich plasma, as you guys know. They did a double spin using a gel kit (Regen), and then they just pipetted off and re-spuned the supernatant.

They pipetted off the supernatant, and then they basically spit it in half. The top half they called plateletpoor. The bottom half they called platelet-rich.

> "Decrease in wrinkles, both platelet-rich plasma and platelet-poor plasma... Improvements in periorbital wrinkles were maintained up to three months."

And so they talk about repeating it. That's not what I was looking for.

"Conversely, the fibrous network of platelet-poor plasma provides not only an immediate volumetric filling effect but also serves as scaffolds, which trap platelets releasing growth factors sustainably."

Here we go, this was most surprising...

"Platelet-poor plasma has been shown to have a greater angiogenic effect than platelet-rich plasma, promoting more neovascularization and neocollagenesis, resulting in soft tissue augmentation and reduction of wrinkles. These mechanisms may contribute to better and longer-lasting wrinkle improvements."

This study did not use microneedling; they only injected subdermally. See a detailed diagram if you download the paper (but you can also see what I think is a better version on our membership site for our providers.⁶

The injections did not help nasolabial folds!

Charles Runels, MD

⁵ "Treatment of Melasma with Platelet-rich Plasma: A Self-controlled Clinical Trial."

⁶ <u>https://VampireFacelift.com/members/wp-login.php</u>. If you want to apply to become a provider of the Vampire Facelift® procedure, go here: <u>https://vampirefacelift.com/members</u>

Regarding nasolabial folds, if you go back and look at when Selphyl brought PRP to market for cosmetic use and marketed their centrifuge for the facial injections, they told people to inject it, quote, "like Juvéderm."⁷

But they weren't proposing to use it along with Juvéderm the way we do now with our <u>Vampire Facelift®</u> procedure.

So, you can see what they did in this study if you study their paper. They fanned it out. They did a retrograde injection to infiltrate intradermally.

But nasolabial folds didn't improve, which is interesting because when Sclafani did his first study with Selphyl in 2009, he demonstrated that nasolabial folds improved.⁸ And that was the main thing they showed on their website marketing that product.⁹

The History of the Vampire Facelift® Procedure

By the way, <u>Selphyl</u> is a great product. It's the only one that comes with the calcium chloride, as far as I know, to activate it (for the other kits, we purchase the CaCl separately). Their only downside is that their tubes are only 8 ml (so you really need to spin more of them than with the Regen tubes for some of our procedures).

But a lot of people tried it and found out they really couldn't sculpt with it. And the changes in the nasolabial folds were not as dramatic as what you could get with an HA filler. So a lot of people just quit using it.

And I had the not-so-smart, but turned out to be useful, utilitarian idea that went crazy, of combining the HA filler with the PRP (in two separate injections) when you inject subdermally and called it the Vampire Facelift[®] procedure. And then you get the benefit of sculpting and the wrinkles that we are talking about.

This is not microneedling. This is just injecting subdermally. The bottom line is that platelet-rich plasma helps prevent aging, but platelet-poor plasma, according to this study and others, actually does more to prevent wrinkles than platelet-rich.

⁷ "For Healthcare Professionals | SELPHYL."

⁸ Sclafani, "Platelet-rich Fibrin Matrix for Improvement of Deep Nasolabial Folds."

⁹ "For Healthcare Professionals | SELPHYL."

Charles Runels, MD

Now, what does that amount to, practically speaking?

If you have a gel kit, you don't have to split it out. They've demonstrated by doing this split that when someone tells you that when you use platelet-rich plasma, it doesn't work unless it's five to 10 times the concentration of whole blood—that is not true for cosmetic indications.

The research shows that this is true in the orthopedic space. So, if you do joint injections, you do need 5-10x concentration of whole blood.

But you guys know, I've always wondered if that applies to the cosmetic space. This is the first study I've seen where they compared the two (PPP & PRP); in some cases, the platelet-poor part worked better.

But what that tells you is you have a gel kit; you don't have to split it. Just use it all, and you get both effects. The splitting helps you see that you don't need the super concentrated platelet-rich plasma in the skin. They split them out so you could see that, but in actual clinical practice, you don't have to split it. You just spin the gel kit, use everything that's above the gel, and you're going to get everything that's in the platelet-poor, quote, "and the platelet-rich."

So I found this to be, even though it's not a big study and they admit we should have a bigger study that looks at it, but I think it's a good, it's the best I've seen that makes the case that you don't need five to 10X concentration when you're doing cosmetic work. And my suspicion is that we probably don't need five to 10X when we're working around the genitalia because we're dealing with vascular tissue, unlike when you're dealing with joints.

So let me give you the link to this one.¹⁰ I think this one was needed and important to what we do, and it also gives you at least one supporting article for the idea when you're working with the face, you don't have to have five to 10X concentration of the whole blood to get a good effect.

You can make the case that when you're doing super concentrated PRP in the face, you could be losing some of the benefits of what's in the plasma. This would also imply that if you are washing the platelets (as some do) to decrease the pain and replacing the PPR with saline, you may be decreasing the effectiveness.

Here's an Email You Could Send

- I. Copy and paste the following message into a new Word document.
- 2. Then edit it so that it sounds like you.
- 3. Add a story or a personal observation if you have time.

Charles Runels, MD

¹⁰ Tsai et al., "Platelet-Rich Plasma Versus Platelet-Poor Plasma for Treating Facial Photoaging."

4. Then fill in the information with your phone number, etc. and send it to your patients.



Hello (first name),

With spring approaching, you may want to do all the best strategies for protecting the skin. Of course, you should be using your sunscreen, but did you know that our Vampire Facelift® can not only helpe reverse aging but also help prevent sun damage?

Here's research that just came out to support those ideas ←

If you want to go into the Spring with the best of protection from the sun, and start the year with your best face, now is the time to contact us to see if the <u>Vampire Facelift® procedure</u> is best for you.

(Add in your own photos or your own experience of a testimony from one of your patients if you have one)

Best regards,

(your name) (your phone) (your webpage where you talk about the Vampire Facelfit or your home page)

PRP for Vesicovaginal Fistula

This one is going to be more applicable to surgeons, but all of us in primary care should know about it.¹¹

This is not the first time I've seen this. Still, these people did the histology to show that when you use platelet-rich plasma when you do a ureteral vesicovaginal fistula repair, you get better healing.

So you have this vesicovaginal fistula, and they make an attempt to close it with surgery, and it doesn't work.

So then, they inject PRP and make a second attempt.

¹¹ Streit-Ciećkiewicz et al., "Influence of Platelet-Rich Plasma on Recurrent Vesicovaginal Fistula—A Histological and Immunohistochemical Study."

They then do the histology and show that when you use the PRP, as you would expect, you get neovascularization, new collagen, and and enhanced inflammatory infiltration (to facilitate healing), and the woman gets well.

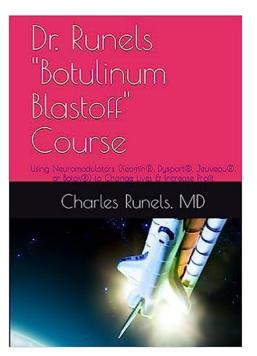
So that's the point of the study.

Many of us don't do that procedure, but it's nice to know this study; so if you're going to send them to a gynecologist who does this repair, they might be open to including this as part of the procedure. Or send them to one of our gynecologists ¹², who already has a PRP centrifuge in their office and would be all about including this as part of that repair.

And with that, we'll end it, unless there's a question. Let's see...

Can you use PRF with our procedures?

I get a lot of questions about PRF (not the same as PRFM) and they talk in here about *heating* the platelet-poor plasma. I know that there are people in our group that use it.



I don't.

We recently covered a paper that reviews all the different strategies and the whys and why nots.¹³ ¹⁴ ¹⁵

To me, PRF is not as effective as activated PRP. Maybe, one day, I will be proven wrong. But so far no one has shown me the science that prove me wrong...I am eager to see it, if someone wants to show ti to me.

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¹² Our O-Shot® providers can be found in the directory at <u>OShot.info/members/directory</u>.

¹³ Fermín et al., "Review of Dohan Eherenfest et al. (2009) on "classification of Platelet Concentrates."

¹⁴ DeLong, Russell, and Mazzocca, "Platelet-Rich Plasma."

¹⁵ Toyoda et al., "Direct Activation of Platelets by Addition of CaCl2 Leads Coagulation of Platelet-Rich Plasma."

My horror is that opinions my be biased in favor of PRF because it is cheaper than PRP. One <u>reason for</u> <u>our group</u> is to help maintain a price point that allows us to afford the best of materials without losing money (paying to take care of patients instead of making enough profit to support our families and our practice; on cannot take care of people for long if you are losing money).

And part of it is just its mechanics. I like what I am injecting to be aqueous, especially when I'm injecting through a 30-gauge needle into the clitoris (I do not want to use a larger gauge needle than that). And the process of preparing a PRF and then turning it aqueous, I think, makes it less effective than PRP.

So maybe that's my bias, but we have some review articles we've covered here that support that.

If you're going to use it to patch a wound, if you're a dentist or you want to put it under the eye and you're not worried about, which I would, putting PRF causing blindness under the eye, but if you want to use it for... In my mind, the best case for that is covering a surgical wound in dentistry or some sort of wound care where you want that clot to stay in a place.

But for our procedures, injecting the clitoris or the corpus cavernosum of the male or spreading it out the way we just described, I just think we have stronger science and more than a decade of history of PRP working. And we are able to support the cost of the FDA-approved kits in that regard. I don't think the science supports the cheaper alternative, so there's not a scientific or a financial reason to swap in my mind, but I could be proven wrong.

And that's the only question I see so thank you, guys. Hope that was helpful to you. Grab that link, shoot it to your people if you do cosmetic work, and say, "Here's research showing that what we do can help." And we can make it even better by combining it with both XEOMIN and your fillers if you do that. But just injecting the PRP as a standalone, you're going to see some improvements.

Okay, you guys have a great day. Thanks for being on the call.

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Tags

Journal Club, Platelet-Rich Plasma (PRP), Platelet-Poor Plasma (PPP), Cellular Mechanisms, Growth Factors, Telocytes, Neovascularization, Neocollagenesis, Clinical Research, Skin Rejuvenation, Wrinkle Reduction, UV Damage, Aging Skin, Facial Aesthetics, Subdermal Injections, Cosmetic Procedures, VISA

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System, Double Spin Technique, Tissue Augmentation, Angiogenic Effect, Microneedling, Selphyl, HA Fillers, Vampire Facelift, PRP in Cosmetic Practice, UV Light Protection, Skin Aging, Nasolabial Folds Improvement, Tissue Repair, Vesicovaginal Fistula, Surgical Healing, PRF vs PRP, Clitoral Injections, Corpus Cavernosum, XEOMIN, FDA-Approved Kits, Aesthetic Medicine.

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