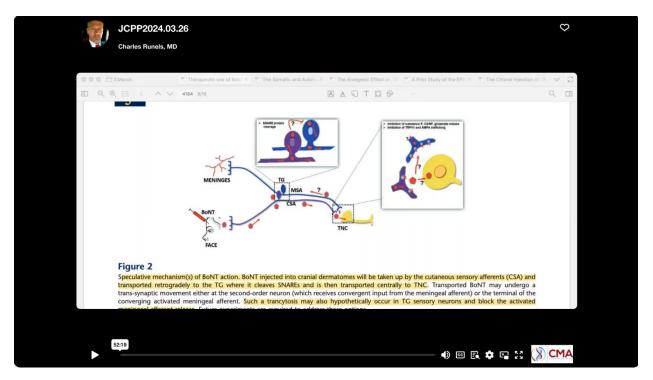
JCPM2024.03.26

The following is an edited transcript of the *Journal Club with Pearls & Marketing* (JCPM) of March 26, 2024, with Charles Runels, MD, and Alexandra Runnels, MD, FACOG.





Topics Covered

- The Progression of Ideas that Led to the Development of the Clitoxin® Procedure.
- How our group (the Cellular Medicine Association) helps with quality control
- Miscellaneous Steps & Pearls Regarding Offering the Clitoxin® Procedure
- Why learning this is like showing music to an accomplished pianist
- Why I prefer to hide on the websites completely but don't
- The Average FSFI Seen in Women with Dysfunction and the Average FSFI Seen with Normal Function—and what it means
- When is it OK to use prescription drugs off-label?
- Alex's Clitoxin® Procedure Pearl #I: Accuracy
- Alex's Clitoxin® Procedure Pearl #2: Volume

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- Alex's Clitoxin® Procedure Pearl #3: Counseling
- Alex's Clitoxin® Procedure Pearl #4: Readiness
- Alex's Clitoxin® Procedure Pearl #5: Urge
- References
- A Note about BOTOX®
- Relevant Links



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®, & Clitoxin® procedures.

Transcript

Thank you for attending our *Journal Club with Pearls & Marketing* (JCPM). I'm excited about the research we are sharing with you today. I put it in the download section of your app.

The Progression of Ideas that Led to the Development of the Clitoxin® Procedure.

We finally published our paper (my wife <u>Alexandra Runnels, MD, FACOG</u>, and I) about using botulinum toxin in the clitoris.¹ As some of you know, we call it Clitoxin, C-L-I-T-O-X-I-N. Let's go through the steps that led to the idea and talk about what is left to be done for this to become standard of care and commonly practiced within our group, hopefully very soon broadly and eventually covered by insurance.

Charles Runels, MD

¹ Runels and Runnels, "The Clitoral Injection of IncobotulinumtoxinA for the Improvement of Arousal, Orgasm & Sexual Satisfaction- A Specific Method and the Effects on Women."

Let me start with a shout-out to you guys because having the CMA group to inspire me and allow extra time in the morning to think has been life-

changing, and next to my family, probably the best blessing ever.

And another shout out to Dr. Steven Luther because he said, "Hey, would you write a book about Botox?"

So, I did.

And then, while writing the chapter about migraines, I saw this picture (Figure $1)^2$...

I stared at it for days.

I thought, "How could I have not known this?"

The implications are tremendous. I always assumed that botulinum toxin alleviates migraine by relaxing the muscle, but that's old school, and what's happening is that the toxin is taken up by Schwann cells by endocytosis and migrates along the axon; they even measured the speed of the migration in mice.



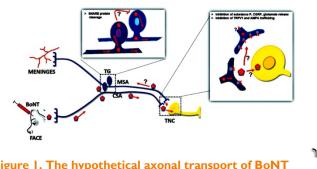
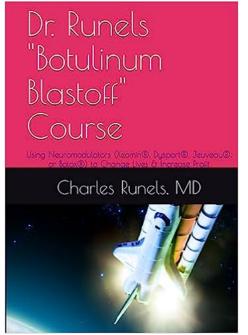


Figure I. The hypothetical axonal transport of BoNT from the procerus to the trigeminal ganglion blocks pain transmission from the meninges. [Ramachandran, 2014]

Then, at the ganglion level, it affects the afferent and the efferent transmission to the autonomic nervous system, which also affects the somatic nervous system; that's how it blocks the pain fibers from the meninges.



As you guys know, I've had this longstanding goal of having a poster of the female orgasm system and one for the male orgasm system on my wall to stick next to the respiratory system and the cardiovascular system. To pester myself into action, I bought posters of different body systems and plastered them on my bathroom wall. I think there are about 8 of them or 10, I don't know. It's enough to cover all the walls from floor to ceiling. It's the lymphatic system, the gastrointestinal system, and the skeletal system, and not one of them says anything about sex; you can have a system that helps you understand lymph but not one that helps you understand sex—something about that seems sideways. You have the reproductive system, but that is not the same. So, in thinking about that, I started seeing and thinking more about how the autonomic nervous system integrates into the feedback loops of the female sexual response.

To see where that led, remember two pictures; these two explains how botulinum toxin (BoNT), done in our very specific way (Clitoxin[®]), could improve sexuality in females: (1) Figure 1, and (2) Figure 2.

The part that was not obvious is that *it is not about the muscle*.

Studies using Viagra to relax the smooth muscle (increasing blood flow) in the clitoris to improve sexuality in females showed benefit,³ but it wasn't enough that people started writing these prescriptions as first line. You've tried it, I'm sure, maybe you give it to your patients, but the comments are, "Okay, maybe," but it's not off the wall.

No woman has ever said to me (regarding her use of Viagra), "Okay, this is great; give me refills for the next six months."

Almost every gynecologist has botulinum toxin in their office. Still, it's for muscles: relaxing the smooth muscle of the bladder, relaxing the vaginal wall for vaginismus, or it has been used to try to *attenuate*

³ Tuiten et al., "Efficacy and Safety of On-Demand Use of 2 Treatments Designed for Different Etiologies of Female Sexual Interest/Arousal Disorder."

the pain response in vulvodynia or to *attenuate* the sexual response in persistent genital arousal disorder.

But it's never been studied at all for making anything sexual increase, like increased arousal, libido, lubrication, or orgasmic response.

Never been studied.

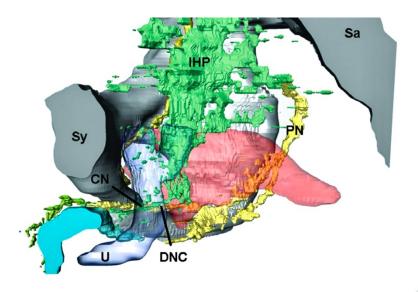


Figure 2. The green represents autonomic innervation; the yellow is somatic innervation. [Bekker, 2012]

Also, you can't find where it's ever been injected into a clitoris—ever, probably for fear that it might attenuate things. But if you look at this (Figure 2) and start thinking, not somatic, but you start thinking about the autonomic nervous system, then you look at the innervation; it's dramatic.

The yellow is the somatic innervation, the pudendal nerve turning into the dorsal nerve of the clitoris. The autonomic innervation is green, and the inferior hypogastric plexus turns

into the cavernous nerves. Look where they go; that's the clitoris. The cavernous nerves merge with and run alongside the dorsal nerve of the clitoris. It's all there.

The cavernous nerves lead to ganglion, then to the inferior hypogastric plexus, which leads to the hypogastric plexus.

Well, where does it go from there?

With the parasympathetic nervous system, it goes from the cavernous nerves to ganglion that line the vaginal wall, and then those ganglion lead to the inferior hypogastric plexus. BoNT, hypothetically, if it behaves as with the treatment of migraines, migrates to those ganglia, which then signal through afferents—the hypothalamus!

Where is the arousal center?

The hypothalamus.

Charles Runels, MD

When a woman feels, or a man feels, "I've just got to have sex. I don't care if it wrecks my marriage, if I lose my job, I wind up in jail, I get shot, it doesn't matter," that is not a cerebral response, that's a lizard brain response—that's the hypothalamus.

That's the response that makes the alligator (and they do eat people) climb out of one of these ponds down here in South Alabama or South Florida and eat somebody because they're not meditating on anything except, "I want to eat and have sex."

That's your midbrain. And thankfully, we have a cerebral brain to tell us, "Oh, this probably isn't the best way to live your life, and we should damper this down."

Every one of the domains on the female sexual function index measures the response of your lizard brain or hypothalamus: arousal, lubrication, orgasm, satisfaction, only pain is not autonomic. So you can no more tell yourself to be aroused than you can tell yourself to have a bowel movement. Both of those things (sexual arousal and bowel movements) are autonomic.

It doesn't mean you give up on the physical. If you need a bowel movement, take some magnesia milk, give yourself an enema, do some yoga, or go for a walk. But if you want to have a bowel movement, you go to sleep, and then your parasympathetic nervous system kicks in, and you wake up and have a bowel movement because your peristalsis goes up when you're at rest. So, what we're talking about is how to signal and talk to that hypothalamus.

Most people want to have sex with someone who is not mechanically going through the sex. You want to have sex with someone because they want you because their lizard brain wants you. And even with the love emotions, with the top emotion of the affections, it's nice if someone accommodates without arousal, and that happens, It's not a bad thing; it's a beautiful thing. But it's more beautiful and fun if the affection and the love and the connection and the trust and the understanding tells your lizard brain, "Because of all these things, I want to open my legs and have sex with this person."

Now, if you say in migraine, you can use the procerus or the corrugators as a port to inject the ganglion, then maybe we could use the clitoris, right where we do our O-Shot[®], as a port to inject the ganglion of the vaginal wall, and then signal to the hypothalamus, "Let's have sex."

I was worried that, if it worked, it may cause three months of persistent genital arousal disorder. In fact, a few of our patients did have persistent genital arousal disorder, but it lasted only for a few days, and it did not lead to a plane ticket to Vegas and a divorce; our patients found it to be fun. So, it worked.

Now in mice, they injected the whisker patch and then they tracked the botulinum toxin and documented that it migrated to the ganglion.⁴ Look at the year on this study. This was done in 2012. And the guys who did it, which I think it was a landmark study, they said, "Hey, if this applies to other parts of the body, this could be a strategic therapeutic idea that may have far reaching implications."

Then you throw that together with this study where we showed our O-Shot[®] worked;⁵ so we already know how to inject the clitoris. We've had a decade of safety when injecting platelet-rich plasma (PRP) into the clitoris before we did this study of injecting BoNT into the clitoris.

We have so much safety within our group (the <u>Cellular Medicine Association</u>). This doesn't mean other people are not trying to figure out what we're doing and doing horrible stuff like using freaking 18 gauge needles and stuff that causes me horror when I hear about it. But for those who know what they're doing, we have a decade-long history of safely injecting the clitoris. If you extrapolate our number of providers and the number of procedures done, when I survey our providers, we're at a million procedures by now, with no serious, long-lasting sequelae. The worst I've seen so far with the O-Shot[®] procedure has been a temporary decrease in arousal and orgasm that lasts anywhere from a few days to a few months. But this is a handful out of a million, at least probably a million people over a decade's time. And as far as I know, everyone who's suffered has recovered.

How our group (the Cellular Medicine Association) helps with quality control

So that's the progression of the ideas. I don't think I'm ever the smartest person in the room, but I think I've been gifted with being in the right place and putting this together and talking with my wife, plus the patients that have been done with this and the whole planet have been by her, I did some, but this math, what you're looking at is largely her work, and I've asked her to be on the call today so you can ask her questions as well.

So we can answer your questions, but we have more about how to do the procedure on the <u>membership site.</u>

Always remember this: if we are members of a group that sayes, "Okay, give us some money and we'll let you advertise a name," that is a dangerous scam.

Charles Runels, MD

⁴ Marinelli et al., "The Analgesic Effect on Neuropathic Pain of Retrogradely Transported Botulinum Neurotoxin A Involves Schwann Cells and Astrocytes."

⁵ Runels, "A Pilot Study of the Effect of Localized Injections of Autologous Platelet Rich Plasma (PRP) for the Treatment of Female Sexual Dysfunction."

By the way. Anybody who's in our O-Shot[®] provider group can do this. There's no extra cost for anybody. But, we're not going to offer the name Clitoxin[®] to anybody to use in advertisement who doesn't already know how to do the O-Shot[®] because, in our study, PRP increased the response by 50%.

And second, we want to make sure people who do the Clitoxin[®] procedure understand how to inject the clitoris, which you have automatically if you are doing the O-Shot[®].

So if you go there right now, there are, I think, three videos to watch. You can do the whole page in an hour, just do it properly. And then if you read every reference, it would take you, I don't know, depending on your speed of reading, somewhere probably around a week or more. So, you don't need that, but you can read the ones that perk your interest or that bring up questions, but you'll need an hour to study the how-to-do page and then just copy paste the questions and answer them and shoot them to an email, for my staff to certify you to advertise the procedure in your practice.

Miscellaneous Steps & Pearls Regarding Offering the Clitoxin® Procedure

There will be a logo so that patients can find who has studied those materials. It's an hour of your time. And without that, this is all a scam. With it, we know that there's some measure of protocol. Doesn't mean it won't change. The O-Shot[®] protocol has changed several times over the past decade, mostly by input from our members. I would be foolish to not welcome input and want it from you guys, but at least start off learning the way we know it works.

I would not use PRF for this procedure, or even for the O-Shot[®] in the clitoris. I think using PRF and then making it such that you can inject it through a 30-gauge needle brings up too many questions and we already know it works with PRP. So just go with a good FDA approved device that makes PRP.

If you're using the Emcyte device, ask them to swap out the coagulant. For some reason that anticoagulant has caused problems, and you should have that swapped to ACD solution. The centrifuge is wonderful, but the anticoagulant should be swapped out.

For malpractice insurance, the best way to talk with your insurance provider about this, and some of you already have insurance, (some of you've already been working on this) is to think about this like an extension of the O-Shot[®].

If you just go de novo to an insurance agent and say, "Hey, I'm going to start shooting botulin toxin the clitoris," that's a big jump. They don't know about shooting anything into the clitoris. But if you say, "Here, there's this O-Shot[®] I've been doing with a decade long history," it makes more sense to your carrier. If your carrier won't provide it, we can usually get you certified and insured for the limits of possibility of being sued in your state through very reliable carrier that works with our CMA members—but only if you have a certificate from our group showing your studied our materials. It may have

Charles Runels, MD

changed, but there have been countries in Europe where you cannot do the O-Shot[®] under their main provider unless you have a certificate from our group. That has nothing to do with me. What it has to do with is this: our group does things right and we've spent around a million dollars a year, sometimes more, sometimes less, every year for the past probably four years to run off people who pretend to be us. For example, last week I got an email or came to our office from one of our providers with this story: some poor woman who had something, literally last week, something stupid done to her (her O-Shot[®], it hurt horribly, and she had dramatic drop in her sexual response) came to see one of our providers to see if something could be done, and it turns out the one who treated her was not on our provider list, so we have no idea what was even done to her.

That happens.

I probably get an email like that once a month. Less than it was a year ago, but probably once a month. And then of course we send our attorneys after that person who falsely advertised being in our group.

So we have an excellent reputation that's grown for more than a decade because we have a protocol that's thought out by our group with it being modified as things might've changed and tried and proven and other people are spinning off lots of research around the ideas that our group developed.

I suspect the Clitoxin[®] procedure is going to be the same. There will be people that do it in a stupid way and hurt people. There will be people that do it maybe better than we do, maybe in some less effective way than we do. But I think we will remain the de facto standard if we keep spending a million dollars a year running off the people who pretend to be us, and if we keep being diligent about making sure anyone listed on a directory as providing this has taken the time to study the materials.

It's not like going to school for the next year. It's an hour. If you already know how to do the O-Shot[®], which means you already had the credentials to learn that.

Why learning this is like showing music to an accomplished planist

To me, all these procedures are like this: Give me a complicated Bach piece and put it in front of my piano. I'm going to stumble through it and just play pieces of it. But give that same piece to someone who knows, who's a really accomplished pianist. They'll just sit down and play it. So that's how our procedures are. We don't approve people to study our materials unless they have baseline credentials. So if you're doing the O-Shot[®], you're overqualified to do Clitoxin[®].

I have not yet put the icon for Clitoxin[®] on the directory because I'm not ready for us to start letting patients know in a strategic and amplified way what we are doing. There's a mountain of things that are done behind the curtain to make things go viral, which I've learned over the past decade, really the past two decades. Sometimes it works, sometimes not. But I'm stacking up the dominoes, and the major part

Charles Runels, MD

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is our reputation and the intellect and the devotion and volition of the members of our group. You guys are phenomenal, and I don't want something to dud out. So, eventually, there will be a press release and many other things to ensure this gets press. Maybe it won't, and maybe other studies will show that we're crazy. But so far, anecdotally, many of you guys have tried this already on yourselves, your spouse, and your staff, and the things we're hearing are sensational. I'm hesitating because I'm not even sure I should say them; they're so sensational.

Why I prefer to hide on the websites but don't completely hide

I try to stay hidden on the patient-facing websites because I do not want it to be about me. It needs to be about helping patients. It needs to be about our providers. It needs to be about the reputation of our procedures. It was two years after we rolled out the Vampire Facelift[®] procedure before I had my name on the website facing patients (https://vampirefacelift.com). And that's the reason I just said.

But when the legal fees started stacking up, and people started pretending as if they invented it and wanting to build their own websites (taking away from the doctor members of our group), my intellectual property attorney said, "You've got to make yourself known on the websites for me to defend the property so that you can defend the reputation and the standardization of these protocols."

So that's what I did.

Right now, we have a website, <u>clitoxin.com</u>. I put it here to hold the place, but we will develop it more soon. When you click on find provider, you'll see that it will take you to our O-Shot[®] provider list in a moment. For now, we are using this video of my wife, Alex, and me presenting the paper in your download to a meeting where we first presented the research. That is not what I want there. I want this on the website, but it may belong on the research page. And what I would prefer to have here is videos or news interviews of you guys. If you make a video where you interview a patient or you make a video where you describe how the procedure works and you shoot it to me, I'll figure out a way to integrate it onto this website.

There's also a page that looks just like this on <u>oshot.com/clitoxin</u>. So that's something you can do to get ready. I do expect this to go viral. I mean, how can the press not talk about botulinum toxin in the clitoris? Maybe they can avoid it, but I don't think they can.

This is the directory for the O Shot[®]. And what we've done is we've put icons so patients can scroll down. Of course they can search by their country, their state, their zip code, but let's just go... I'll pick California. When it pulls it up, the icons will say, "This brilliant doctor offers radio frequency," see our code up here, " and she also treats like lichen sclerosus. So that's how people can find someone. There will be an icon sitting here that also talks about Clitoxin[®]. And that's the icon that will go by your name

when we're ready to go live with this. So simultaneously it'll be, or nearly it'll be the icons will be placed, there'll be a press release, and then I'll tip the dominoes and do other things to make this go crazy.

If you have trouble securing malpractice insurance from your carrier, let us know. But that's how you should do it. If you're with the main carrier, we usually recommend, then call him, give him, he's putting the details in place. You'll need a certificate which will come to you from us showing that you did our test and you'll need to show him your consent form, and we've put a model consent form on the



Figure 3. Alexandra Runnels, MD, FACOG

membership website. Show that to your attorney, alter it to match whatever is different about your state or country, and then show your agent that, the certificate, the consent form, and talk about it being an extension of the O-Shot[®].

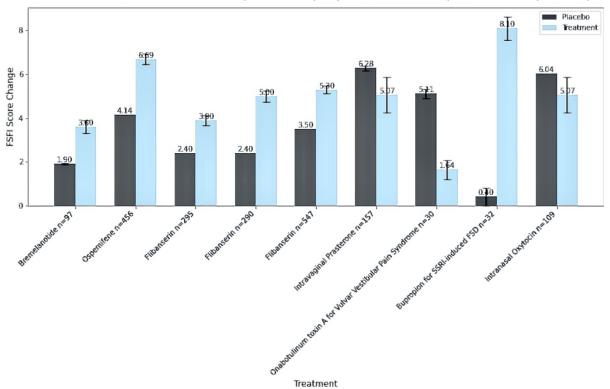
And I think with that, can you talk, Alex? So, I didn't know when I'm married to Alex that she actually knows statistics better than me, which I love.

Alexandra Runnels, MD, FACOG:

This is a representation of a meta-analysis that was done (not by us) looking at all of the accepted treatments for female sexual function and looking at their change in total FSFI score comparing that to placebo (Figure 4).⁶

There are three columns that have flibanserin in them. They were looking at different doses of flibanserin. The two FDA-approved medications for female sexual function are flibanserin and bremelanotide.

⁶ Weinberger et al., "Female Sexual Dysfunction and the Placebo Effect."



Notice the treatment effect is compared to the placebo effect in both of those medications (the first one and then the third, fourth, and fifth data points); they're just not all that impressive when you compare

it to a placebo. Then when you look at our results either with or without PRP, the treatment effect or the change in the total FSFI score was "robust," is a mild way of saying it (Figure 5).⁷

Charles Runels, MD

Figure 4. Metanalysis of a variety of accepted treatments of female sexual dysfunction and the placebo effect observed in their respective studies. [Weinberg, 2018]

⁷ Runels and Runnels, "The Clitoral Injection of IncobotulinumtoxinA for the Improvement of Arousal, Orgasm & Sexual Satisfaction- A Specific Method and the Effects on Women."

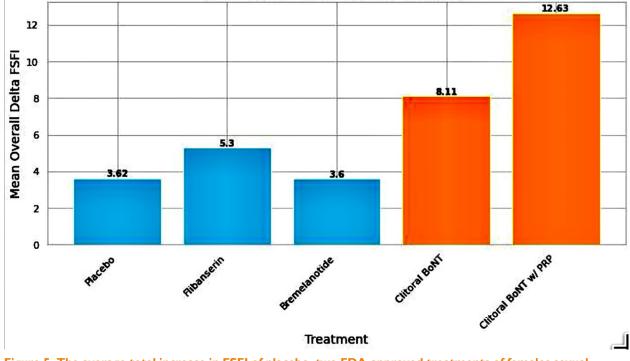


Figure 5. The average total increase in FSFI of placebo, two FDA-approved treatments of females sexual dysfunction, and BoNT injected into the clitoris. [Runels, 2024]

Then, when you compare our results with BoNT to just a straight placebo and then look at what a placebo looks like compared to flibanserin, you could use flibanserin as the control arm in a future study looking at clitoral botulinum toxin rather than using a true placebo—and still show the benefit!⁸

Charles Runels, MD:

The big criticism and the big hurdle to get over with any study of female sexual function is that any treatment in this situation is known to have a large placebo effect. Almost anything is going to make things better. But the problem with that in regards to our study is with the practicality of using a placebo: with platelet-rich plasma, as you guys know, it's hard to do a placebo, double-blind placebo

⁸ Runels and Runnels.

Charles Runels, MD

study because saline can be used as a treatment.^{9 10 11 12} Not IV, but if you're hydrodissecting tissue with saline, that's been shown to be able to treat leishmaniasis, granuloma annulare, scarring, joints, and nerves.

Hydrodissecting tissue is not nothing when you're doing regenerative studies.

It's different if you're doing an IV study where you're shooting morphine in the IV and the other IV is saline. Many people, including Dr. Virag, who did the study of PRP for Peyronie's disease, consider saline as a placebo, not to be a placebo.¹³ And we've covered this in Journal Club multiple times. There are review articles in the dermatology literature that the regenerative arm of medicine does not always pay attention to.¹⁴

So the reason we have this graph here (Figure 5) is we were concerned that people would think our results were all placebo, but in this meta-analysis, thank you for this, doctor, for doing this study; in this meta-analysis done by Weinberg, he looked at what happened in the placebo arm of these multiple studies, and it's all over the map. Except for some reason, you only see an almost negligible effect from the placebo when you're swapping from an SSRI to Wellbutrin to treat women who have decreased sexual function on an SSRI. For all the others, it's significant. So it's a bit confusing because if you average all the placebo arms for that meta-analysis, you get a 3.62. Bremelanotide is a little bit less than that, but it just so happened in their study that they got a placebo arm that was only 1.9. I'm not sure how they pulled that off; it's one of the lowest of the studies with their placebo arm. If they had the same reaction with the placebo as with the others, would it have been approved? I don't know. I'm kind of looking at that sideways. But whatever, they made it work.

But the point that Alex is making to really note is that when you put those numbers, is that it's hard to say a change in the total FSFI of eight is a placebo arm when none of the other studies. If they had a

Charles Runels, MD

⁹ Asghar et al., "Efficacy and Safety of Intralesional Normal Saline in Atrophic Acne Scars."

¹⁰ Cass, "Ultrasound-Guided Nerve Hydrodissection: What Is It? A Review of the Literature."

¹¹ El-Amawy and Sarsik, "Saline in Dermatology."

¹² Saltzman et al., "The Therapeutic Effect of Intra-Articular Normal Saline Injections for Knee Osteoarthritis."

¹³ Virag et al., "Evaluation of the Benefit of Using a Combination of Autologous Platelet Rich-Plasma and Hyaluronic Acid for the Treatment of Peyronie's Disease."

¹⁴ El-Amawy and Sarsik, "Saline in Dermatology."

placebo arm to that degree, none of them would be used; the FDA would've approved none of them. So it's shockingly a lot—our results.

And then, when you throw the PRP in and you get a 12, it becomes stellar.

The Average FSFI Seen in Women with Dysfunction and the Average FSFI Seen with Normal Function—and what it means

Also, if you look at the average female sexual function index on a female who walks into your office and says, "I'm having sex problems," It's 20.

To count as dysfunction, it must be less than 2.65.

To go from the average of 20 to more than 26.5, you must bump it by 7 or more (if they started with that average of 20 seen in women with dysfunction).

Because hardly anything does that (increases by 20), you have to recommendation for multiple modality therapies.

But if you look at women who have never complained and say, "Yeah, my sex is great," and do FSFI on them, they will have an average of 30.

So, going from 20 to 30, nothing on Weinberg's metanalysis does it. Nothing, not one thing on that chart.

But with botulinum toxin into the clitoris added with plate-rich plasma, you bump over the 10 it takes you to get from 20 plus 30. So, it has the potential, if other studies show what we have found, to be a monotherapy.

Now, our study doesn't mean it's a guaranteed magical shot that fixes everybody's sex because maybe she's getting beat up by her lover, maybe she got abused, maybe she's got lichen sclerosus, or some other reason for dyspareunia (BoNT was not as helpful in that situation), and maybe she needs testosterone. But it's the best thing that's ever been shown to help FSFI if our numbers are confimed in future studies.

I've left this part out, Alex, then I want you to talk about pearls about doing the procedure.

When is it OK to use prescription drugs off-label?

The last thing is, what about the off-label treatment problem with BoNT injected into the clitoris?

Charles Runels, MD

We made the discussion board of this paper longer than you might normally do, anticipating that question, and I gave references about guidelines on writing prescriptions off-label.¹⁵

Off-label use of botulinum toxin over the past two decades has been very common.

Depending on which study you read, 21 to 31% of the prescriptions, give or take, of all the prescriptions written by primary care doctors are off label.¹⁶

In other words, it's not uncommon, and it's needed because what happens (if you read the studies that are referenced) what happens is that you have orphan categories where the drug companies know it's going to be a waste of money for them to try to meet the guidelines for hard to study populations like children, pregnant women, women of childbearing age, and something hard to prove benefits to the guidelines of the FDA. For example, with sexual dysfunction in women, to meet approval, you must show satisfaction (subjective), not just one of the domains like you do with men (like, simply improved erection, objective).

So it's nearly impossible to get approval for some indications in some populations, even when the research is strong, and the indicated use is common. So, you have drugs that are commonly prescribed, like Wellbutrin for sex. That's off-label.

Do you want to see something off-label that's done all the time? It's Wellbutrin for sexual dysfunction with SSRI-induced sexual dysfunction. That's an off-label indication done all the time. You'll probably never see that in on-label indication; but, it is a well-known, documented use of the drug.

Alexandra Runnels, MD, FACOG:

Also, note, you may look at this (Figure 4) and say, "Bupropion looks like it's amazing for sexual function," but you must remember that this is treating women that had SSRI induced sexual dysfunction, so that SSRI was discontinued to treat them with bupropion. So, it's not really even comparable across the board. You're taking away the thing that caused the dysfunction in the first place. They'd probably get better without the Wellbutrin too.

Charles Runels, MD:

¹⁵ Runels and Runnels, "The Clitoral Injection of IncobotulinumtoxinA for the Improvement of Arousal, Orgasm & Sexual Satisfaction- A Specific Method and the Effects on Women."

¹⁶ Radley, Finkelstein, and Stafford, "Off-Label Prescribing Among Office-Based Physicians."

It's a great point, Alex. It's a two variable study and most of the people on this call know they would, perhaps, even do better than that, if you stopped this SSRI and just gave them a testosterone shot.

So it's a two variable study. That's a huge point.

So back to this off-label problem: I want to make sure everyone knows you can't practice medicine adequately without writing off-label prescriptions.

The tragedy is of course that when something's new and off-label, some of your colleagues won't write it and some will never write it until it's on-label, which means that their patients will never be treated with Wellbutrin for SSRI induced sexual dysfunction or testosterone until there's a testosterone FDA approved on-label for women, which will probably never happen.

So it's commonly known that the FDA regulates the advertisement and quality of drugs and devices. They do not regulate the practice of medicine. So how do you make sure you're within the guidelines of the practice of medicine when you write an off-label prescription?

You need research backing up what you're doing; you need good reasoning for what you're doing.¹⁷ You need a consent form; the person needs to know it's off-label, other alternatives offered (including no treatment at all), and other things did not work or the patient did not want them, and you need to keep records (see more about this below).¹⁸

If you just stop women walking down the sidewalk, around 40% of women have sex problems that they're distressed about, and most of them have tried something that didn't work.

So you do the interview, you make sure that you've tried other things or that they decide they don't want the other things: for example, they don't want to throw up from bremelanotide, they don't want to avoid alcohol with flibanserin, although some drink with it.

But in those studies, the average increase with flibanserin was one extra sexual intercourse per, not day, not per week, but **one per month**. That was the big great astounding result of it. So maybe they tried that it didn't work as well as they hoped; or they just want to go straight to clitoral BoNT.

¹⁷ Van Norman, "Off-Label Use vs Off-Label Marketing of Drugs."

¹⁸ "'Off-Label' and Investigational Use Of Marketed Drugs, Biologics, and Medical Devices Guidance for Institutional Review Boards and Clinical Investigators."

It's informed consent, knowing it's off-label. Then, you're practicing medicine by a reasonable method supported by research and not just by the study but by all the references cited in this study.¹⁹

Now, Alex, take it away with pearls on how to do it. And then again, I recommend you guys don't be aggressive about advertising it yet, but think about it, read about it, do read our training, listen to what Alex is about to tell you, and show up at the next Journal Club with questions and let's meticulously do this so that our patients are cared for and those who this might benefit are offered, and those who are not, they get the counseling or the testosterone or they get all that plus this. Talk to how you're integrating in this your practice, Alex, and pearls about doing it and then let's call it a day.

Alexandra Runnels, MD, FACOG:

Okay, I sure will. I want to say one more thing about the red and blue picture (Figure 5). Can you go back to that?

Charles Runels, MD:

Yes.

Alexandra Runnels, MD, FACOG:

I think these numbers are valuable and helpful for many reasons, all the things you've already discussed. But with females, it's so hard to objectively quantify effects as far as sexual function goes or objectively quantify even what's going on with them. But often, and this leads into the question that you asked me about patients and talking to patients about things, but for men it's so easy to say, "Okay, well something worked or didn't because they either got an erection or they didn't, they got an erection that they were able to use for penetrative purposes or not, or their angle of deformity for their Peyronie's is measurable and changed and that's measurable."

But for women, it's a whole lot harder to objectively quantify anything. And I'm not saying that this changes anything, but when talking to a patient about what they can expect, like we can use changes in the SHIM score in men with erectile dysfunction issues when talking about what they can expect to happen after they get a P-Shot[®]: if they started off with mild erectile dysfunction, you can counsel them as far as how much effect they likely could see with their P-Shot[®], and sometimes it's helpful to know that information.

Charles Runels, MD

¹⁹ Runels and Runnels, "The Clitoral Injection of IncobotulinumtoxinA for the Improvement of Arousal, Orgasm & Sexual Satisfaction- A Specific Method and the Effects on Women."

You can improve the SHIM score by about seven points in good hands with a good P-Shot[®], and that's enough to take some men from mild erectile dysfunction to no dysfunction at all. But a man with severe dysfunction is likely going to need other things still and maybe going to need another two or three P-Shots[®], plus other modalities to get where they are happy with their erection again.

I bring this up because this topic can be pretty difficult to discuss with a woman regarding what they can expect, what this will do for them, and how they can expect it to help. So, it just piggybacks on what you were saying about dysfunctional FSFI scores being around the 20 mark and needing to improve it 10 points to get to the average, not dysfunctional place. These are just good numbers to log into the brain, I think, as far as providers go and thinking about talking to the patient.

Charles Runels, MD:

That reminds me of something, Alex. If you're writing an off-label prescription, you have consent that you've discussed how this is an off-label indication with a person. You have it based upon them deciding that and knowing the other alternatives and either having had them, and it didn't work, or turning them down, and it must be based on science. We've covered all that. I left off that you must *keep records of what happened*. It doesn't mean it has to be in a journal article somewhere, but it should be in your chart. I highly recommend that you're not just doing SHIM scores pre- and post on your male patients who receive a P-Shot®, but that you do the female sexual function index pre- and post-O-Shot® and Clitoxin®.

And I like the female sexual distress scale, too, both of which can be downloaded from our membership site. You can also download these surveys from the internet, and there are apps that will grade them for you.

But that should be done and put the scores in your chart so you're keeping track.

So far, we've had 8 people out of 12 years, 8 who wound up in front of their medical board. Never for anything that went wrong with their patient, always because a colleague down the street somehow figured out how prosperous they were and that patients were doing remarkably well. It's the old crabs in a bucket thing. And the last one of our members that wound up going in front of the board was like the previous 8, very prosperous, very successful practice taking care of men with ED and a lot of men suffering with Peyronie's disease—who loved him for their results; and one of his colleague complained to his medical board.

And he told me, "I just laid down my numbers from my charts; and they wound up shaking my hand and saying, 'yeah.'"

Charles Runels, MD

And of course, it helped that he was in our group because he could say, "Here's 3,000 doctors in 55 countries who do what I do and many of them professors at their local medical school; so, I'm not making this stuff up. And here's the research."

Remember, one of the things you need for an off-label prescription is supportive research.

So, he said, "Here's the research backing up what I'm doing. Here are my records of where my people got well. So now, who wants to take their pants down and get a P-Shot[®]?"

And that's how it went. They were shaking his hand and congratulating him. And that's how it's gone for all the people in our group who faced a similar challenge (8 of them over 12 years).

So, keep records. As Alex said, for a record, you need an objective measure. For the mentioned provider, he uses a protractor to measure the change in his Peyronie's patients. He gives them an erection with a Trimix shot and then measures the angle with a protractor. He then gives them a P-Shot[®] brings the man back 8 to 16 weeks later and measures the angle again—documenting the improvement.

Some people are going to need a penile implant. Some people will not be helped by our procedures. Nothing works all the time. There are no magic shots. So, the other part of the formula for off-label prescriptions (in my opinion) is if they don't get better, give them their money back.

All of it, with a smile.

They did not pay you for a shot; they paid you for the results.

So if they don't get better, if they do not LOVE the results (not in a day or a week, or they want to pay the light bill in a day and ask for a refund), but after the usual time for results, give it back to them.

I have never said no to giving someone their money back. It's the cheapest money you spend. But if they come back to soon, preferably ask them to wait at least eight weeks, the full effect of the botulinum toxin is probably much faster but PRP takes at least that long. But give it eight weeks and then give them the option of a money back or repeat and always give them money back if that's what they want.

Alex's Clitoxin® Procedure Pearl #1: Accuracy

Okay, Alex, tell your best pearls for doing the Clitoxin[®] procedure. You don't have to tell them how to do it, it's on <u>the website site</u>. But what would be your tips, assuming they've watched the instructions there?

Alexandra Runnels, MD, FACOG:

Charles Runels, MD

I think one important thing regards the clitoral injection technique: with PRP alone, it is of no consequence if notice that some of your PRP isn't going into the clitoral body, nothing bad has happened, nobody has been hurt. You just redirect your needle until you get it into the right spot so that the PRP is flowing into the body of the clitoris and not the surrounding area.

But when you inject BoNT into the clitoris (Clitoxin[®]). I do not know that you may not have an unwanted (though likely temporary) side effect.

So it is important to be very exact about needle placement and needle angle and directing it into the body of the clitoris.

Remember, skeletal muscle fibers (not smooth muscle like the arterial circulation of the clitoris) make up the bulbospongiosus muscle and the ischiocavernosus muscle in women just like in men, and with women, as with men, those muscles need to function properly for orgasm, for orgasmic release. So I don't think the right thing to do is let the botulinum toxin diffuse too far away from where you're putting it for fear of potentially relaxing those muscles and causing an unintended problem. There's also the urethra and the bladder nearby, which is not a bad thing necessarily to get some botulinum toxin into those structures, we don't know affects you may see.

Alex's Clitoxin® Procedure Pearl #2: Volume

We're also using a larger volume of fluid then with the O-Shot[®] alone, so instead of 1 cc into the clitoral body, it's 2.5 cc's total volume, whether you're doing it with added PRP or with reconstituted with just normal saline. It takes some time to inject that much material. I used to think that a small clitoris was maybe not able to accommodate that volume of fluid, but that's not true. I've been able to put that volume of fluid in any size clitoris. It's a matter of positioning and depth of your needle.

Everybody on this call who has been doing O-Shots[®] knows that injecting the clitoris and getting it right every time is one of the steeper learning curves of the procedures that we do. It is very important to not be cavalier about It; take your time and to it right.

Charles Runels, MD:

So, why did we increase the volume of the clitoral injection (with BoNT compared with the basic O-Shot[®] procedure?

A few years ago, David Harshfield, MD (in our group and a radiologist) came to my office and did an ultrasound of the pubic rami looking at the flow of the PRP as I was injecting into the clitoral body of a kind woman. Even though we use 1 cc when we normally do the O-Shot[®], we didn't really see a waveform change on ultrasound until we got to round 2 or 3 cc's of fluid injected into the clitoris. Since

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this procedure (Clitoxin[®]) is not just (our hypothesis) about relaxing smooth muscle within the clitoris for increased vascular flow but is also about using the clitoris as a port to inject the ganglion along the vaginal wall by axonal transport, we thought a full filling of the entire clitoris (which averages approximately 5 inches long when the entire clitoris is considered) would facilitate the maximal axonal transport.

That is also the reason for not going down on the units of botulinum toxin. In the studies of men that investigated BoNT for erectile dysfunction, dosages of 50 and 100 units were commonly used. Should doing of the clitoris be based on the volume of the clitoris compared with that of the man, one might significantly decrease the dosage. But, if the mechanism of action is thought to be partly due to activation of ganglion with resultant activation of the arousal center of the the hypothalamus, then there would be no reason to decrease the BoNT dosage in women compared with men.

Also, remember, when we do our P-Shot[®] procedure or Priapus Toxin[®], we use a volume of 10 ml. So, we postulated a good starting point would be 50 units of BoNT in women for full activation of the ganglion and 2.5 cc of volume for full saturation of the clitoris (largely based on the ultrasound observation in my office).

More research is much needed to confirm or tune up our initial postulates.

What other tips do you have for us, Alex?

Alex's Clitoxin® Procedure Pearl #3: Counseling

Alexandra Runnels, MD, FACOG:

Okay, I know we're running behind so I'll try to be as fast as I can.

The patients are going to ask, "What's going to happen afterwards?"

That's going to be one of their biggest questions, of course. They're not going to be asking about all the data and article stuff.

For the majority of the patients who I've treated (and what I personally saw after the procedure) the timing of the results are exactly like with relaxing wrinkles in the face with BoNT: it starts to take effect within a couple of days and then it seems it evolves into full effect at about the two week mark. And, with the 50-unit dose that we're using, the effects are lasting about five to six months in most patients. The reason I know that, or I'm able to say that is that that's the timeframe when women would request to have it done again because they were starting to notice the effects that they were attributing to the botulinum toxin were starting to wane, it was around the five to six month mark.

As far as counseling purposes, with a 50-unit dose, if it lasts for six months, that's twice a year; that is less than we put in the face.

Alex's Clitoxin® Procedure Pearl #4: Readiness

Then the other thing that as far as what else to expect, this was huge, this is huge. Almost every patient had the same spontaneous comment: they had a significantly decreased length of time from mental arousal, mental sexual arousal, to their body's physiologic arousal response to where they felt like they had control over their bodies again; they felt and they would report a sexual confidence that they had lost over the years, and they often would say that they felt almost like a man must feel when they're interested in sex in their mind and their brain, and then their bodies respond.

Healthy men able to get an erection quickly and easily and instead of having to wonder if their body's going to work and betray them and take forever to physiologically get there, meaning (for woman) engorgement and lubrication and increased sensation and then that increased confidence, sexual confidence snowballs over time with event after event, to become easier to have an orgasm and easier to become... Quicker to become lubricated and quicker to become aroused and that sort of thing. So that was the comment that was super exciting, I thought, because I've never heard anything else described that way for women at least.

Alex's Clitoxin® Procedure Pearl #5: Urge

And other tip is that I had several patients spontaneously report, and this is in the study, spontaneously report improvement in their urge incontinence symptoms, which makes a lot of sense to me. I didn't expect it, but then once they talked about it, it makes a whole lot of sense when you are talking about the clitoris being a port to the pelvic ganglion and what happens, what we think happens within the pelvis when you fix one pelvic organ dysfunction, often you can see another pelvic organ dysfunction simultaneously improve even if you didn't treat that other organ, and that goes back to what Charles was talking about in the beginning of the call regarding the autonomic nervous system innovation of the pelvis and the pelvic ganglion. So we've been using botulinum toxin to treat overactive bladder for a long time, so it just makes sense to me actually that this is actually improving that kind of bladder dysfunction, which is kind of cool because the O-Shot[®] helps with stress incontinence. So now we're able to suggest what procedure to help them based on what their constellation of symptoms are.

Charles Runels, MD:

That's wonderful. Thank you, Alex. And I think what will probably evolve is that if you think about Clitoxin[®] as O-Shot[®] 2.0, then yeah, they can be teased out, that's the other thing.

Charles Runels, MD

Rather than coming up with one name that means both. "Yeah, you're getting an O-Shot[®]. Do you want me to do Clitoxin with it too? Okay, you got O-Shot[®] with Clitoxin."

But it's really an extension. Most of the women want both. Still, some might've had an O-Shot[®] last week, so they don't need the PRP part; they just got it. So then, in that case, you do the botulinum toxin alone.

But I think the improvement in urge incontinence is remarkable, and Alex is the first persona to notice: the idea that one could treat mostly urge incontinence, always mixed, but mostly urge incontinence by simply injecting the clitoris with BoNT rather than needing to trouble the woman with the pain and possible complications of injecting the bladder wall—that is amazing if it is borne out in future studies. But as a gynecologist, she was treating people who would've normally gotten the bladder wall treatment and saw them come back and say, "Yep, it fixed it."

Just shoot up the clitoris instead!

So, thank you for jumping on the call, Alex, and I think we should probably stop because we're well over the hour, but we'll continue our discussion next week and thank you guys for your attention and commitment to learning and deep thought regarding these important issues.

Thank you, Alex. Bye-bye.

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Note about BOTOX®

Allergan notified us in writing (from their attorney) that they do not want the BOTOX[®] brand associated with Clitoxin[®]. I'm not sure why, they did not give a reason. The other manufacturers of botulinum toxin have not made the same demand. My speculation: as with your colleagues that do not want to do sexual medicine, some companies are afraid of sexual medicine and fear the association will hurt their reputation—that is only my speculation. I do not know their reasoning. But they do not want the word Botox on the same page on your website as Clitoxin[®]. We used Xeomin[®] for our study, from Merz. We received no money from Merz, not even samples to do the study—we bought the product at full price. But they know of our research and have not cast stones.

Tags

Charles Runels MD, Alexandra Runels MD, Vampire Facelift®, Orchid Shot® (O-Shot®), Priapus Shot® (P-Shot®), Priapus Toxin®, Vampire Breast Lift®, Vampire Wing Lift®, Clitoxin®, botulinum toxin, PRP, penile rehabilitation, endothelial growth, prostate surgery recovery, vacuum device, daily Cialis, Trimix, patient protection, FDA-approved kit, advertising strategies, vampirefacelift.com, BrandShield, opt-in emails, O-Shot® products, marketing tips, sperm count enhancement, testicular health, Hands-On Workshops, Dr. Runels Mind Mining Method, Botulinum Blastoff Course, Cellular Medicine Association, online training for PRP procedures, membership website access, ONTRAPORT, product sales, sexual health innovation, female orgasm system, male orgasm system, autonomic nervous system, female sexual response, Viagra use, smooth muscle relaxation, sexual improvement, arousal enhancement, libido boost, lubrication increase, orgasmic response, pudendal nerve, dorsal nerve of the clitoris, cavernosal nerves, hypothalamus arousal, female sexual function index (FSFI), urge incontinence, pelvic ganglion, SHIM score, erectile dysfunction treatment, stress incontinence, pelvic organ dysfunction, off-label treatment guidance, consent forms, medical record keeping, insurance coverage strategies.

Helpful Links

- -> Next Hands-On Workshops with Live Models <-<
- -> Dr. Runels Botulinum Blastoff Course <-<
- -> The Cellular Medicine Association (who we are) <-<
- -> Apply for Online Training for Multiple PRP Procedures <-<
- -> <u>Help with Logging into Membership Websites</u> <-< <u>Charles Runels, MD</u>

-> The software I use to send emails: ONTRAPORT (free trial)<-<

-> Sell O-Shot® products: You make 10% with links you place; shipped by the manufacturer), this explains and here's where to apply <-<

Charles Runels, MD