

When It Sucks To Be A Woman: The Treatment Of Pelvic Problems, Incontinence, And Other Taboo Topics

Dr. Kent Holtorf interviewing
**Dr. Betsy Greenleaf, DO, FACOOG
(Distinguished), FACOG, MBA**



Kent Holtorf ([00:00](#)):

Here we go. Hi this Dr. Kent Holtorf with another episode of the peptide summit. Today we'll be interviewing Dr. Betsy Greenleaf with the title of When It Sucks to be a Woman: Treatment of Pelvic Problems, Incontinence, and Other Issues we Don't Like to Talk About. I think that that's very true and it's such a huge problem. Women just don't talk about it. I know a lot of women have the issues—I find out later, but when they come in, they don't tell me. So, I think she's doing some great, cutting edge work. She's a premier, a women's health expert, entrepreneur, inventor, and business leader. She specializes in pelvic medicine and reconstructive surgery for over 20 years. She's a trailblazer, she's the first female in the United States to become board certified in urogynecology. I'm interested to see how that really connects and makes a difference. Because really, if you go to GYN for hormones, they don't do hormones, I think that combination is great. I'll ask her, I'm not sure how many even are in the country, but she possesses a professional reputation that has led to being sought after by medical societies, associations, corporations, she provides lectures, teaching, advanced trainings. 2018 she was honored with the title of Distinguished Fellow of The American College of Osteopathic Obstetricians and Gynecology for service and dedication to the field. That's a big deal. She holds committee positions on many national women's health organizations. So you gotta put up with a lot of bureaucracy and be a, really, go-getter. She's a board examiner for the American Osteopathic Board of Obstetrics and Gynecology. All that, very impressive. She serves as a spokeswoman for the American Osteopathic Association and her quotes are appearing in many major media outlets. She's a CEO of The Pelvic Floor Store, and that's www.pelvicfloorstore.com, an online store dedicated to finding reliable products for pelvic health. And that's the thing, people just get so confused on what to get. So she tells you what's the best of each thing. She manages a blog, she's very busy at drbetsygreenleaf.com. She is a host of Some Of Your Parts Podcast, which is at www.someofyourparts.libsyn.com, which is dedicated to the wellness and notion that you are greater than the sum of your parts. I really like that. She takes a holistic body, mind, spirit approach to healing and wellness, which you don't see in a double boarded person, which is really nice to hear. She believes many answers to a healthy life are found within. I second that. She views

her role in life as a wellness guide. And I think that's wonderful. So I very—thank you for being on and welcome.

Betsy Greenleaf ([03:32](#)):

Thank you so much. It's an honor to be here.

Kent Holtorf ([03:35](#)):

Great. And, yeah, so we'll just get going. So tell me about—what's a typical type of patient you see and how does this combination of combined board certification help women that they wouldn't see by going to a GYN or urologist?

Betsy Greenleaf ([04:01](#)):

It's interesting because the specialty of urogynecology—which they've now renamed it, but the renaming of it is 10 times longer, so urogynecology is a lot easier to say than female pelvic medicine and reconstructive surgery. But it basically came out pretty recently in the 1970s, and we didn't have board certification until probably about 6 years, 6, 8 years ago. So the nice thing about it is it really took more of a focus on the pelvic floor and the pelvic area being the area below the belly button and above the thighs, because what we found that—it was just like more of a niche for people to kind of get into and specialize because 50% of women will have some sort of pelvic health problem at some point in their life. Those problems weren't necessarily being addressed by the regular gynecologists who are busy delivering babies or doing pap smears, or it wasn't being addressed by the urologists who are really kind of tending to their male patients. I mean, it's not to say that either one of those specialties is bad, it's just that as a generalization, that's how we saw things. So urogynecology—you can actually become a urogynecologist either by doing gynecology first and then doing a fellowship in urogynecology, or being a urologist and then doing a fellowship. So it's a little combination and it really just has to do more with dealing with the bladder, and the vagina, and some of the health problems that women tend to face, especially as they're aging.

Kent Holtorf ([05:39](#)):

Yeah. I think it's a little scary that gynecologists, they take the vagina and the uterus, and urologists get the bladder.

Betsy Greenleaf ([05:47](#)):

Yepp, yepp.

Kent Holtorf ([05:47](#)):

And we treat a lot of these chronic multi-system illnesses and chronic Lyme, and huge percent have pelvic floor dysfunction. Oftentimes it takes a number of visits to get that out of them, but it

is really hindering their quality of life and a lot of pain and incontinence. There's a lot of ways to improve that. So what is the standard conditions that you see? What would the standard treatment be?

Betsy Greenleaf ([06:21](#)):

So usually, typically in a urogynecology practice, you're gonna get referred patients that have recurrent urinary tract infections, kind of like where the doctors have gotten to the point where they've thrown antibiotics at it, and thrown antibiotics, and they get to the point where they're like, "Okay, nothing's working. What do we do now?" Maybe I'll just start with that one, because that kind of ties into what we're talking about here. But, we're trained as doctors that the typical standard treatment for an acute—meaning, like a sudden onset urinary tract infection is 3 days of antibiotics. Alright, so you get 3 days of antibiotics and the majority of people will feel better. Then there's going to people who it doesn't—they don't feel better. So then by the time they get to me, up til recently, my only other choices were, "Well let's just give you more antibiotics." We know that the more antibiotics I throw at you, not only you're going to become resistant, but now I'm going to be killing off that beautiful microbiome in your intestines and really how that affects you medically and can cause other conditions.

Kent Holtorf ([07:29](#)):

But [inaudible] especially doesn't care about that. They care about their little part.

Betsy Greenleaf ([07:33](#)):

Yes.

Kent Holtorf ([07:33](#)):

There's so many studies now saying even shorter courses of antibiotics cause a lot of problems. Yeah.

Betsy Greenleaf ([07:40](#)):

And I've gotten to the point too, I think, recently as I go out and practice, I keep learning more and more and I go, "Why didn't anyone tell me this before?" Or there's new discoveries like this whole field of peptides is just fascinating to me and I think that it's really gonna explode. It's starting to already, but I think we're really gonna see a lot of just general acceptance and more development of this.

Kent Holtorf ([08:07](#)):

Yeah. There's so many studies—when I give lectures, people are like, "Wait a minute—" For a 45 minute presentation I'll have like 140 slides. I always have way too many, but all huge reference. There's hundreds of studies. People say, "Why haven't I heard of this?" You know? And sometimes

lecturing it, I hesitate because they do so many things it kind of sounds like snake oil, but here's the reference. Boom, boom, boom, boom, boom. Yeah.

Betsy Greenleaf ([08:32](#)):

It's amazing. I think the fact is that when we look at the body as a whole system, in general, the body wants to heal. So what I like about the peptides is that these are all natural things that are found in the body, so we're kind of like using the body's own system and kind of almost like magnifying it to heal. What I'm looking at right now and I'm paying close attention to is there's been tons and tons of studies on recurrent urinary tract infections and recurrent vaginal infections. They have found that the antimicrobial peptides that are normally found in the bladder or the vagina, that in some people, for whatever reason and we're not really quite sure why, that they're missing those. And those are the people now that are developing these chronic infections. A lot of these studies use like, "Hey, this might be a way that we can treat people in the future is with some of these anti-microbial peptides to restore their system back to the way that it should be."

Kent Holtorf ([09:37](#)):

Yeah. When you look at—I think we've turned into immunomodulatory clinic, if anything. You say we're a fatigue clinic, which we are, and we're finding with these chronic infections, they suppress IgA which is secreted into the liver, the gut,

Betsy Greenleaf ([10:31](#)):

Exactly, exactly. I think particularly I tend to think that way because of my training as an osteopathic physician, but then as I went on through practice, I found that when you first come out of fellowship, you're all like, "All right, I'm trained like this", and you kind of have the blinders on and all I could see was the pelvis. Then as I went on in training, I realized, "Wait a minute, well, they're having pelvic symptoms, but what else is going on? Are their pelvic symptoms a sign of some larger systemic issue?" And for the majority of the conditions I'm finding that that's true.

Kent Holtorf ([11:08](#)):

Yeah, and I remember being—and I got into it like a lot of people, cause I was very sick myself. I know other doctors have a family member themselves. And you're just told alternative means no evidence.

Betsy Greenleaf ([11:22](#)):

Yes!

Kent Holtorf ([11:22](#)):

So I'm like—I didn't tell anyone that I go to the so-called "alternative", I hate that term. Integrative, functional, I don't know what the heck you call it. I just think we're practicing better medicine and more evidence based. They're more evidence-based than the stuff they're feeding us in residency and doctors are still practicing what they learned in residency 20 years ago.

Betsy Greenleaf ([11:45](#)):

Exactly.

Kent Holtorf ([11:46](#)):

You give them studies, they won't read them. And they go, "Don't confuse me with the facts. This is the way do it. This is our protocol." Not to bash them, but the system—they don't get paid extra to try to figure something out. They get paid extra to see more patients and be more cost effective.

Betsy Greenleaf ([12:04](#)):

Exactly. I think that's probably the biggest problem.

Kent Holtorf ([12:06](#)):

Be more cost effective, it doesn't mean being the detective and the sleuth and going down a path and trying to figure out what's wrong with this person. It's, "Okay. This is—well, it's not that. Well, psych consult." You know?

Betsy Greenleaf ([12:22](#)):

I think that's part of the reason I ended up leaving. I'd worked for years for a hospital and I got to the point where working for the hospital was affecting my own health because they were telling me, "See more patients, spend less time, see more patients, spend less time." And I'm like, "No, that's not the way I want to do it." Like, I want to be able to sit down and really spend like an hour with somebody and kind of like talk to them and figure out and address all their issues.

Kent Holtorf ([12:46](#)):

Oh, you'll get called in and go, "Oh, what's the problem here?"

Betsy Greenleaf ([12:49](#)):

Oh yeah. Yeah. So I finally—

Kent Holtorf ([12:52](#)):

"Stop doing such good care!"

Betsy Greenleaf ([12:55](#)):

Exactly! [Laughing]

Kent Holtorf ([12:55](#)):

That's what a lot of these HMOs—is that they'll cut the lowest 20% of cost effective physicians, which means those who do the least amount of tests, those who make the least amount of diagnosis, those who do the least labs, those who do the least treatments, they get to stay and they cut the ones that do the most, which are doing the best care and taking the longest time with patients, they're gone.

Betsy Greenleaf ([13:21](#)):

Yeah. Oh, I've seen it time and time again.

Kent Holtorf ([13:24](#)):

Yeah. Yeah. So, interesting. You broke out. I hear double boarded, I usually go, "Oh no, it's gonna be—" Yeah.

Betsy Greenleaf ([13:33](#)):

[Laughing] It's really more my husband's like, "Stop doing things!" He's like, "You do too much." But I think life is short and there's so much I'm interested in and I just want to do everything.

Kent Holtorf ([13:43](#)):

It's passion! If we didn't believe in it, in that passion, you wouldn't be doing it. So, how do peptides help pelvic health? How have you found—?

Betsy Greenleaf ([13:58](#)):

Yeah. I mean, even going back to—well, some of the other conditions that we see as urogynecologists other than recurrent urinary tract infections is we see incontinence, prolapse where things are drooping and dropping, especially as people get older. And also like overactive—

Kent Holtorf ([14:16](#)):

I think the scare of hormones is really caused a big problem with that.

Betsy Greenleaf ([14:20](#)):

Yeah. Oh, sure.

Kent Holtorf ([14:23](#)):

Peptides go so synergistically with hormones and—yeah.

Betsy Greenleaf ([14:26](#)):

Then what we see, especially there's two kinds of incontinence and people—a lot of women just accept it as a normal aging process.

Kent Holtorf ([14:34](#)):

Because their friends have it too!

Betsy Greenleaf ([14:34](#)):

They don't talk about it. I always tell people just because it's common doesn't mean it's normal and it doesn't mean that we can't do things about it. So the two kinds of incontinence is one is stress incontinence, when you cough, laugh, sneeze, jump up and down, you leak. A lot of that type of incontinence is usually due to ligament damage that may have initially happened during childbirth, though you don't have to have given birth to develop that. It could be any kind of ligament damage to the pelvis from pressure, if you cough too hard, or you lift something too heavy. Then there's urge incontinence and urge incontinence is where people have to run to get to the bathroom. Like one minute they're fine, next minute they're like, "Make way!" Rush to the bathroom. That's usually due to either irritation in the bladder wall itself, or muscle spasms, or even nerve irritation. I think up until recently, with me discovering this whole world of peptides which I just feel like a Pandora's box has been opened up, but we had limited treatments. I mean, there's always been movement in our field, but for stress incontinence, really, the only thing we've had up until recently has been surgical, is to basically go in and implant a sling, which is usually a mesh and everybody hears the word mesh. I know there's a lot of things that are bad about mesh, but sling—

Kent Holtorf ([16:02](#)):

If you're up late night, yeah, commercials, yeah.

Betsy Greenleaf ([16:06](#)):

Slings are a little bit different, but that's really been the—I mean, there's other things, but they don't usually tend to work. So slings have been the one thing that really work. So what has been fascinating is there's been a number of studies that they've done—I mean, more so on rats, but we don't have any human studies right now.

Kent Holtorf ([16:28](#)):

Because they're not patentable. So who's going to spend the money to get a new drug and then everyone could use it? You know?

Betsy Greenleaf ([16:35](#)):

Yeah. Exactly. So there's been studies on rats where they've actually gone and actually cut their urethra and they administered BPC-157, which is a peptide, which I'm sure with your peptide summit, you probably have mentioned at some point in time. They found that whether they gave it orally or if they injected it, that those rats, their urethras returned back to normal. So they got rid of their stress incontinence. That's something that I've started to employ because one of the nice things about BPC-157 is that you can take it orally. It doesn't have to be injected like some of the other ones. We're seeing some really nice improvements in urethral sphincter function. So the urethra is the tube that the pee goes through.

Kent Holtorf ([17:27](#)):

Yeah. It's interesting because you also look the other end of the body for GERD, the BPC-157 will tighten the upper gastric esophageal sphincter and tighten that and loosen the lower, so you don't get that reflux. It seems to do the same thing in the bladder where it's going to tighten the lower, so that brings it back to normal. I really think BPC-157, it's kind of the homeostatic peptide. We find if people have—they're hypercoaguable, it brings it down, if they [inaudible] it brings it up, their blood pressure is too high, it brings it down, if it's too low, it brings it up. So it's very interesting how it brings everything back to normal. Like, it's smart.

Betsy Greenleaf ([18:14](#)):

I think it's probably my go to for almost everything now. I've really been very surprised with all the things that it can do. It's almost like too good to be true!

Kent Holtorf ([18:24](#)):

You're like, "Yeah, right, sure it does that too!"

Betsy Greenleaf ([18:26](#)):

I keep checking it, but every time I turn around, I find another study that's like, "Oh, it's being used for this or it's being used for that."

Kent Holtorf ([18:31](#)):

And it's antimicrobial. You know, TB4, which you can do orally, the TB4 fragment basically even kills Lyme cysts better than Tinidazole. So, it has a lot of great properties. You have an [inaudible]—

Betsy Greenleaf ([18:51](#)):

I was reading that using them together, they act like synergistically, that they can—

Kent Holtorf ([18:55](#)):

Yeah, yeah. They have almost the same result in a very different mechanism.

Betsy Greenleaf ([19:00](#)):

One of the other things is that there have been studies—once again, also with rats—for overactive bladder. I mean, the treatments we have for that typically are medicines and the problems with the medicines that are on the market right now is that a lot of people develop dry mouth and they end up—

Kent Holtorf ([19:18](#)):

Oh, yeah [inaudible].

Betsy Greenleaf ([19:18](#)):

The worst ones are some of the older ones that are generic, which unfortunately, when you get a Medicare patient that comes in, your insurance will say, "Hey, we don't want to pay for these newer ones that have less side effects, we want you to take the old generic one." Which, one of the oldest generic ones Ditropan, actually can cross the blood brain barrier and you see tons of confusion. That's all I want to do is like, I don't want to put one of my senior patients on something that's gonna make them confused, especially—and give them dry mouth, especially if they're on multiple other drugs. So, there have been—

Kent Holtorf ([20:00](#)):

I suffered from that myself and what I've found with our patients and really, it happens in yourself, you've got to know a lot more, is that I thought I had a big prostate because I just felt like I had to go to the bathroom and urinate constantly, especially when I had a flare. But then when I calmed down the inflammation, I think my immune system got better. I don't have it anymore!

Betsy Greenleaf ([20:31](#)):

I'm sure.

Kent Holtorf ([20:31](#)):

I mean, I'm sure my prostate just didn't shrink totally, that was never the problem. It was an immune dysfunction. So like the Thymosins, the BPC again, working together really helped that. So instead of just like throwing meds at people, it's like looking at the underlying cause, which I think lends to that functional medicine where—hey, it takes a little longer to talk to the patient, figure these things out and have more tools in the toolbox, but it really was enlightening. I'm like, this is lame, I've—

Betsy Greenleaf ([21:11](#)):

It is so incredibly common that when they look at overactive bladder, that it can start as early as in your twenties. But by the time you reach your seventies, there are more people walking around at any given time with overactive bladder than has the common cold.

Kent Holtorf ([21:27](#)):

I never knew that.

Betsy Greenleaf ([21:28](#)):

It's incredibly common but people don't talk about it, you know?

Kent Holtorf ([21:34](#)):

Well, we gotta like, interrogate, "Do you have it? Are you sure?"

Betsy Greenleaf ([21:40](#)):

Yeah. How many times do you go to the bathroom? How many times do you get up at night? I mean, also, it balances out with how much you're drinking, but that's what the other thing that people do, when they have bladder symptoms or bladder problems, people tend to not drink fluids. So we actually know that 85%—

Kent Holtorf ([21:58](#)):

All these different coping mechanisms.

Betsy Greenleaf ([21:59](#)):

Yeah. 85% of Americans are already dehydrated, so that's already a problem. But it actually backfires for bladder conditions because it makes your urine more concentrated and more concentrated urine is more irritating to the lining of the bladder and it actually makes the symptoms worse. So you should be drinking when you have these problems, but then we know that the BPC-157 is actually soothing to the lining of the bladder, whether it's actually soothing the muscles or we do know—they used to think that urine was sterile. Then we now know that you actually have a normal microbiome, so our normal bacteria that will be in the bladder, but some people, if they're missing some of these peptides in their system that they could get more irritation from those bacteria that are present.

Kent Holtorf ([22:54](#)):

Do women get hesitancy where it's hard to go?

Betsy Greenleaf ([22:59](#)):

Yeah! Yes.

Kent Holtorf ([22:59](#)):

You go to, whatever, to a sports game, there's a bunch of guys lined up and half the guys are there forever. I had that too. It's just like—it's embarrassing. I've been in the bathroom for so long, and it was inflammation.

Betsy Greenleaf ([23:14](#)):

Yes.

Kent Holtorf ([23:14](#)):

It was when I would have a flare and I needed to modulate the immune system with the peptide. I didn't even know if women had that problem!

Betsy Greenleaf ([23:24](#)):

Yeah, we do. In fact, actually, it's interesting because I was reading an article not too long ago, going back to the peptides, and this is something that I specifically specialize in because of where I did my training, but we really spent a lot of time looking at the urethra. A lot of specialists kind of overlook it in women. But mycoplasma and ureaplasmas, which are a type of bacteria, are very common as causes of urethritis in women. Urethritis in women is often overlooked, but that can cause spasms, or hesitancy, or swelling. And, yeah.

Kent Holtorf ([24:05](#)):

Because they don't check for it.

Betsy Greenleaf ([24:05](#)):

Also going along with—like looking at some of the peptides, I've said that with some of the anti-microbial activities of these peptides is that these things can prevent mycoplasma infections or Lyme disease. We've seen a lot of effects with Lyme on the functioning of the pelvic floor and pelvic inflammatory diseases.

Kent Holtorf ([24:29](#)):

Oh, yeah. Sometimes that's their worst symptom, you know?

Betsy Greenleaf ([24:33](#)):

Yeah.

Kent Holtorf ([24:33](#)):

It is like, quality of life. Even for me, I'm like—I mean, I had heart failure, which was worse but second in line... It's embarrassing too. It's like you're gonna be sitting there forever, like, "Whoa, this is crazy." So that's interesting. So, with interstitial cystitis, so they're finding really it's a mast cell problem, really irritation.

Betsy Greenleaf ([25:01](#)):

Yes.

Kent Holtorf ([25:01](#)):

And I guess the standard is Elmiron or—I always mispronounce—but a mast cell inhibitor. But we're also coming out with KPV, which is a melanocortin which is a profoundly potent mast cell inhibitor. So we're waiting for that to come out. So I'll send you some, love to see how that works.

Betsy Greenleaf ([25:26](#)):

That's great. Yeah. Because the problem with interstitial cystitis is that it's been around—the idea of that condition, which is—it's an inflammatory condition of the bladder that "nobody knows" what causes it. It was recognized in the late 1800s and we haven't gotten any further in the research on it. In the traditional medicine world, the standards are like, "Okay, diet..." And then those medications like Elmiron—some people pronounce it differently. It's tomato, tomato how you pronounce it.

Kent Holtorf ([25:59](#)):

Yeah. I butcher [inaudible].

Betsy Greenleaf ([26:04](#)):

Pentose polysulfate is the generic, but I mean, really from what I've seen over the years is there's really a connection to the gut and that if you have inflammatory gut issues, you are more likely to have bladder issues too. There's also kind of a connection with some of the Lyme—the tick borne diseases.

Kent Holtorf ([26:27](#)):

Oh, yeah. I think chronic infections are causing so many things, neurodegenerative diseases, autoimmunity, all this autonomic dysfunction, then you add the gut brain access in there.

Betsy Greenleaf ([26:41](#)):

Oh, definitely.

Kent Holtorf ([26:41](#)):

What's your thought on the whole gut brain access? How do you approach that with a patient? Or what are some of the things that you do?

Betsy Greenleaf ([26:50](#)):

It's funny, 'cause I heard about the gut brain axis probably about four years ago. I remember the first time I heard it, I thought, "Well, that's weird and like a little woo-woo." But then I started connecting things together and I started looking, especially at my pelvic pain patients. I started looking at them and I'm like, "Wait a minute..." Because these people typically have not only pelvic pain, but they usually have some kind of gastrointestinal, like irritable bowel or some kind of chronic intestinal complaints. They almost always have anxiety or depression, which we used to, in the traditional medicine sense, used to just kind of blow off and be like, "All right, well, they're stressed because they're chronically in pain." Then I started finding that a lot of them had these lower immune systems, like the IGA deficiencies and I started going, "Okay, what does depression, anxiety, immune dysfunctions, these GI symptoms, these pelvic symptoms all have in common?" And I'm like, "Well, the gut!" So I'm like, "There's definitely—" We know that 90% of our serotonin, which is one of our feel good hormones, is made in your gut. So there's definitely a connection between the gut and the brain, you know?

Kent Holtorf ([28:10](#)):

I am just so impressed with what you just said. Pattern recognition that is such a lost art. You're actually looking at all these things and trying to make connection, where that is what medicine is. Now, doctors don't do it. They look at, "You got this? Okay. Here's the algorithm. Treat that." You can have all these other things and they go, "That's not my area." And you're looking at all these systems that have nothing to do with your so called area. I'm just very impressed, I'm also getting teary-eyed—

Betsy Greenleaf ([28:50](#)):

[Laughing]

Kent Holtorf ([28:50](#)):

Because we interview doctors and they just don't think anymore. They'll memorize and say, "What's the protocol?" I'm like, "There is no protocol." It's being that detective and knowing physiology. Now—because I think it's got to the point in medicine where you don't even need to know physiology. It's like, "Well, you got this, the insurance company says you got this, I gotta do this." Or you work in the hospital, or ER, like all the docs are complaining. I mean, you could save a person's life, but if you didn't follow that exact protocol up, you're getting brought up. Like, you don't have to think, you have to memorize now. It's bad for the people that have these multi-system illnesses. I just—ah, I just love you saying that, how you look at all these different things and found that, "Hey, they're connected!" It's just a lost art.

Betsy Greenleaf ([29:45](#)):

I think that's why my podcast originally started out. We were gonna just do a pelvic health podcast and I'm like, "I can't, because I can't even look at my patients anymore—" Sometimes I don't know if it's a gift or a curse because I go in for one problem and then I end up going, "Wait,

we gotta deal with this and we gotta deal with that because everything's connected." We can't just deal with one place you're having your symptoms because your symptoms are a sign of something larger. [Laughing]

Kent Holtorf ([30:12](#)):

It's totally true. We're talking about doing packages for this, but that's connected to that. You can't do a package just for that because it's gonna basically morph into everything.

Betsy Greenleaf ([30:25](#)):

Oh, sure. Sure.

Kent Holtorf ([30:25](#)):

I don't know. It made me very happy to hear that.

Betsy Greenleaf ([30:30](#)):

You know, I think one of the problems is that we've all kind of lost the art of medicine because of the fear of litigation. I mean, I know there's some times that I'm like—'cause I know that I'm making these connections and I might not be doing all the things that my whole organizations are doing, but people are getting better with the things I'm doing because I'm making those connections, you know? Everyone's so evidence based, evidence based.

Kent Holtorf ([30:57](#)):

If you don't get the patient better, you're going to get in more trouble.

Betsy Greenleaf ([31:00](#)):

Yeah, exactly right. [Laughing]

Kent Holtorf ([31:01](#)):

Yeah. I'm serious. It's true.

Betsy Greenleaf ([31:06](#)):

Yeah.

Kent Holtorf ([31:06](#)):

Yeah. Or how about pelvic pain? I mean, I've had a couple incidents of like pelvic floor spasm and I'm like, "Oh my God, I am going to die." I know some women like, painful intercourse, they get these spasms and what a strain on the relationship, or just having it. I'm like, "I don't know if I've ever had this much pain in my life!" You know? How do you address that?

Betsy Greenleaf ([31:38](#)):

It's interesting 'cause that's, once again, that's a subject when you try to look up in traditional medicine, there's not a lot of studies on it. So really, once again, the pelvis for males and women is made of muscle and those are skeletal muscle and they spasm. The reason they're spasming is they're spasming because they're trying to protect you. They're splinting against something. So there's something else that's causing an irritation. So it's always like, we gotta find the irritation. Because treating the muscles—you can get muscle relaxers, you can give pain medicines, which I don't really agree with a lot of the pain medicines for that. But you're just gonna treat the symptoms where we really need to look into why that's happening. Some of the interesting things we've found over the years is the connection with orthopedic injuries, because a lot of orthopedic injuries will actually refer pain to the pelvis and not to where—especially hip injuries and low back. The funny thing about that is you try to get the orthopedist to see a patient who's having vaginal pain. I'm like, "It's their hip! It's their hip. I know I've done their little tests into this, it's their hip!" And they'll be like, "No, no!" They hear vaginal pain and they put their hands over their ears and are like, "Not my problem, not my problem." I can't tell you the number of people where we found that they've had labral tears of the ligaments, the cartilage in their hips, but it referred to the pelvis. I mean, other things like infections cause that irritable bowel. So, these are all other things too that, especially the BPC-157, is great for. It helps with muscle, helps with collagen, and we know it helps with bone repair. It helps with muscles, it's antimicrobial. So it's one of those things that's great.

Kent Holtorf ([33:36](#)):

That's what we train doctors. There's so many peptides and it's like, "Okay, what are the two to start with?" You know, BPC-157 and probably the TB4, 'cause you can't screw it up. Don't worry. It doesn't matter. You can't overdose. They've given thousand times a dose, which you can't do with—try that with any over the counter med, try that with water, you're gonna die!

Betsy Greenleaf ([34:02](#)):

Oh, yeah. [Laughing].

Kent Holtorf ([34:03](#)):

Exceedingly safe and it's funny when I tell people everything it does, they just go, "Yeah, right!" And then you give them the studies, some won't want to look at it, you know? I've had so many doctors like—I used to think that when you have a patient, they have a great relationship with their doctor, they're sick for 10 years when they come in, you get them better, and they go back, they're excited to tell their doctor and you think the doctor's happy. He's mad! He or she. Do they ever call and go, "What'd you do?" They go, "No, that's quackery." Well, it worked. It's a weird world, but I think it's the system.

Betsy Greenleaf ([34:47](#)):

Oh, yeah.

Kent Holtorf ([34:47](#)):

Yeah. But what are the causes of pelvic pain?

Betsy Greenleaf ([34:52](#)):

So they're all kind of related. So a lot of people have muscle spasms in the pelvic floor. You can actually get nerve injuries, like the pudendal nerve often gets injured especially—we've seen a higher rate of pudendal nerve injuries, not only during coronavirus and COVID, because everyone was home, they started going on their bicycles a lot more, but also around the holiday time, because everyone's getting—for Christmas or Hanukkah, they're getting Pelotons. [Laughing] Not to bad mouth Peloton but it's just the seat that you're sitting on for the bike, there's a lot of compression on the nerves that are in the sitz bone area.

Kent Holtorf ([35:33](#)):

Yeah, we've actually seen a lot of people with that and we'll do like peptide injections and other injections, and things like that. It's painful.

Betsy Greenleaf ([35:43](#)):

Oh, sure. Yeah. The problem with it is, is that if you don't take care of it early, you can end up with permanent crush injuries that are harder—I mean, now with the peptides, we're seeing better results with that.

Kent Holtorf ([35:56](#)):

Yeah, you can actually reverse nerve damage and things like that. Like, yeah.

Betsy Greenleaf ([36:02](#)):

Yeah. But then other causes, I mean you can—interstitial cystitis, we know that the inflammatory chronic infections in the pelvis can cause that. Pelvic pain sometimes is related to bowel issues, if you have chronic bowel issues like inflammatory bowel issues. Which a lot of the BPC-157 was originally studied for inflammatory bowel because it is a bowel related peptide.

Kent Holtorf ([36:31](#)):

Yeah. In fact we've had—one story we tell is a 9 year old girl, they were going to take out her colon, right? And nothing worked and gave her the BPC and the TB4-FRAG, dramatic improvement. It turns out she was telling this story at this dinner party and it turns out to be my partner with integrated peptides. She goes, "I went to this doctor..." She's like, "Is it Holtorf?" She goes, "Yeah!"

Betsy Greenleaf ([37:06](#)):

[Laughing]

Kent Holtorf ([37:06](#)):

"He saved my daughter!" It was so cute. But they were going to take out her colon! You know?

Betsy Greenleaf ([37:12](#)):

Oh my gosh.

Kent Holtorf ([37:14](#)):

At 9.

Betsy Greenleaf ([37:16](#)):

It's crazy.

Kent Holtorf ([37:16](#)):

We reversed it. I was looking at your website and I saw medical marijuana and I'm like—

Betsy Greenleaf ([37:23](#)):

[Laughing]

Kent Holtorf ([37:23](#)):

That doesn't fit this double boarded person. Tell me about how you got into that and why?

Betsy Greenleaf ([37:31](#)):

You know, it's funny 'cause I think I got to a point—especially for my interstitial cystitis and pelvic pain patients—I got to a point where with them it's kind of a guessing game. They're not cookbook. It's not like they have these conditions and you go, "All right, you have it, do this and you'll get better." It's like, "You have these conditions, let's try this, let's try that." So I got to the point where there were—some of them where I was trying everything and nothing had been working. So, about 10 years ago, New Jersey started doing medical marijuana and my patients didn't qualify for it. But I was like, "Well, let me sign up to be able to write for it, just in case someday they do qualify."

Kent Holtorf ([38:12](#)):

Wait, why didn't they qualify?

Betsy Greenleaf ([38:14](#)):

Because in New Jersey at the time you had to have either glaucoma or cancer, those were the only two conditions.

Kent Holtorf ([38:19](#)):

Oh yeah. Here you have to have—well, nothing now, but yeah. "I got a headache!" Okay.
[Laughing]

Betsy Greenleaf ([38:26](#)):

So over time, what ended up happening was—in New Jersey, we're still only medical. It's not a recreational. But over time they started opening it up to who qualified. About, maybe three years ago, they started saying chronic pain and incontinence—I mean, not incontinence, chronic pain and anxiety were the two things that for my specialty now I could like write for it. Even then it was funny, 'cause I was a little nervous at first because I didn't want to be like a glorified drug dealer because that's what was happening. There was a practice that got shut down in New Jersey because they just opened up as like the marijuana practice and that's all they did, just hand out prescriptions.

Kent Holtorf ([39:12](#)):

"Oh, let me see. You have this, right?"

Betsy Greenleaf ([39:15](#)):

Yeah.

Kent Holtorf ([39:15](#)):

Did you find that THC containing products versus CBD tended to work better?

Betsy Greenleaf ([39:25](#)):

Actually the honest truth, I find that CBD for the majority of people, especially with the conditions that I take care of, the majority of them do fine with just the CBD. Very rarely do you need the additional THC, but then you do have a handful of people where it just—the CBD by itself isn't doing the job. So sometimes just a little bit of the—

Kent Holtorf ([39:49](#)):

Yeah. Broad spectrum CBD. Some people do better, in our line of experience, with some THC. For me, if there's any tiny bit, I'm like, "Oh my God."

Betsy Greenleaf ([40:02](#)):

[Laughing]

Kent Holtorf ([40:02](#)):

I get freaked out and paranoid, but—

Betsy Greenleaf ([40:06](#)):

Yeah, yeah.

Kent Holtorf ([40:06](#)):

Whereas other people, of course, kinda like it. Now, do you find interstitial cystitis, how often is it isolated? My thought is there's gonna be a lot of other issues with it.

Betsy Greenleaf ([40:19](#)):

Yeah, no, I usually never find it by itself. Usually there's other medical problems. Usually you see—I can almost bet that somebody is going to have either a history of migraines, they're going to have a history of TMJ—not all of them. There's going to be one of these things. Migraines, TMJ, anxiety, depression, irritable bowel, history of Epstein-Barr virus.

Kent Holtorf ([40:48](#)):

Do you find some people have like multiple chemical sensitivity with that?

Betsy Greenleaf ([40:53](#)):

Yes. Yes. Definitely. Definitely.

Kent Holtorf ([40:56](#)):

I find that there—yeah, kind of that mast cell activation syndrome, which, I don't think these things even existed 20 years ago.

Betsy Greenleaf ([41:06](#)):

No.

Kent Holtorf ([41:06](#)):

I think it's all the foods, all the pollutants, pesticides, and they're just—everything's multifactorial.

Betsy Greenleaf ([41:14](#)):

Oh yeah. I definitely agree with that.

Kent Holtorf ([41:17](#)):

It makes it harder to figure out and you gotta look at so many things. What do you treat first? It becomes an art, you know?

Betsy Greenleaf ([41:26](#)):

It's interesting because as I've looked more into the mast cell conditions or histamine intolerance, 'cause we know that histamine is in foods and some people are just intolerant to that. The traditional interstitial cystitis diet, when I've gone back and looked at it, I'm like, "Wait, all these foods are high histamine foods." But I don't think they realize it. I think they just looked at, "Okay, well, citrus fruits tend to irritate people with interstitial cystitis, coffee, tomatoes..." So those foods tend to—we always used to blame it on the acidity and we'd be like, "Oh, well these foods are high in acid, that's why they're bothering you." Well, again, I think it really comes down to we're really aggravating the immune system and they know that when you biopsy a bladder of somebody with interstitial cystitis, you will find ridiculous amount of mast cells in their tissue.

Kent Holtorf ([42:23](#)):

Oh, so right there. I think mold is playing a big role. It's funny, I'm a member of the mast cell mastermind group and these are some of the smartest, geekiest people but they're stuck on direct mast cell inhibition. So I'm like, "Look upstream!" You modulate the immune system and you're not gonna stimulate the mast cells. I gave some talks and one little pearl is that a huge stimulator of mast cells is corticotropin releasing hormone.

Betsy Greenleaf ([43:02](#)):

Okay.

Kent Holtorf ([43:02](#)):

So if you look at someone's cortisol and their ACTH is super high, you know they have high CRH, which stimulates the mast cells like crazy. It's very interesting. I can send you some slides on this, but—so you want to give them a little cortisol, not prednisone, just enough to suppress that CRH. That is just one little thing, but the KPV is a huge mast cell inhibitor. BPC is a huge mast cell inhibitor. TB4 will inhibit mast cells with immune modulation but there's a section that directly stimulates mast cells. So what we do is take that out.

Betsy Greenleaf ([43:44](#)):

That's the FRAG.

Kent Holtorf ([43:44](#)):

So yeah, the FRAG works but doesn't stimulate the mast cells? I think it's interesting with BPC and just thinking of marijuana, whatever, it prevents overdoses like amphetamine psychosis, prevents hangovers, withdrawals—

Betsy Greenleaf ([44:04](#)):

Yeah.

Kent Holtorf ([44:04](#)):

Also found though that if you take a ton of it, it's hard to get drunk.

Betsy Greenleaf ([44:11](#)):

[Laughing]

Kent Holtorf ([44:11](#)):

I gave it to someone and they're like, "Yeah, I took 10, whatever, and I can't get drunk!" You know? So I don't know the mechanism of that, but I'm kind of a semi expert in hangovers because when I first started medicine, we started a beer company, that we had a hangover free beer. We had double blind placebo controlled studies and showed it work, so we brought it out. Immediately the Bureau of Alcohol Tobacco Firearms said, "Nope, you can't put it out. You can't make a healthy beer."

Betsy Greenleaf ([44:45](#)):

Oh, no!

Kent Holtorf ([44:45](#)):

Yeah.

Betsy Greenleaf ([44:47](#)):

That's brilliant!

Kent Holtorf ([44:47](#)):

So, yeah. We didn't have any money to fight them, but maybe we'll do it again. 'Cause I think—

Betsy Greenleaf ([44:55](#)):

Bring it back! [Laughing]

Kent Holtorf ([44:57](#)):

Yeah. Because yeah, the studies showed that basically alcohol converts acetaldehyde, which is like—think of formaldehyde. It's toxic and it bound—the stuff we put in, it bound to that and flushed it out. The study showed the [inaudible] levels would drop and the urine levels would go up. But anyways, that's going off on a tangent. I dunno, maybe we'll edit this out. I don't know. But, let's see. Yeah, so it sounds like you kind of—it's interesting— converted from this double boarded specialist to looking at everything. I think too, is that people look at, "Okay, what's their degree?" Or whatever. But so many doctors, and especially if it's ivory tower, they don't continue to learn.

Betsy Greenleaf ([45:50](#)):

Yeah.

Kent Holtorf ([45:50](#)):

They go, "I know it all", and they're still doing the same thing. I'll do a lot of expert testimony for cases and they say, "Well, the society says this..." You look at only like 9 to 15% of societal recommendations are based on strong evidence. If you look at the World Health Organization, levels of evidence, strongest, double blind, placebo study, then you get the different studies and you get case studies and anecdotal. Although that is societal recommendations because they're shown to be 20 years behind, they cherry pick, they've made up their mind, they don't want to look at all the studies. But it's a battle, you know? I try not to bash, 'cause I think doctors are miserable and why should they learn something new? They're not gonna—it's gonna make their life miserable. So anyway, I think it's wonderful that you're continuing to learn and expanding. Yeah, you're very different than what I thought I saw on the bio. [Laughing]

Betsy Greenleaf ([47:07](#)):

[Laughing] I have to say, what's got me really thinking with these peptides is the reason urogynecology exists, for the most part, is for people who have babies. Nature doesn't care if you damage your pelvic floor, your ligaments. Nature wants to get that baby out. So as long as people keep having babies, there will be vaginas that need to be fixed because things will be dropping and dropping as time goes on. But I've been thinking about it, I was like, "You know what? We need—" Because there really hasn't been anything for prevention of pelvic floor disease. It's more of treatment. And I'm like, "You know what? Maybe we need to start looking at using some of these peptides in our women who have just given birth." I know that there's a question about use in breastfeeding women, but I think it's more just to cover their butts about the usage of some of these peptides. But I really think that if we gave, especially the BPC-157, to people who have delivered then maybe they would—their ligaments would heal the way they're supposed to and they won't have those longterm effects down the road.

Kent Holtorf ([48:24](#)):

I love the way you think. Yeah.

Betsy Greenleaf ([48:24](#)):

It would kind of put me out of business, but—[Laughing]

Kent Holtorf ([48:28](#)):

[Laughing] A lot of surgeons, they don't want to know about this stuff because they want a cut, you know? And that's what—we just did an interview a little while ago, and we're talking about traumatic brain injury. Like, why not give these football players TB4 and BPC as a preventive

measure? It's shown to prevent brain damage from concussions. Although I worry, then they'll even hit harder.

Betsy Greenleaf ([49:02](#)):

More aggressive, yeah.

Kent Holtorf ([49:02](#)):

It's kind of like the cars are safer, so you drive faster.

Betsy Greenleaf ([49:07](#)):

Yeah.

Kent Holtorf ([49:07](#)):

You have daggers sticking out of the steering wheel, you drive slower. So I don't know, but it just seems like—traumatic brain injury, whole other topic, of course. But you're thinking the same way.

Betsy Greenleaf ([49:21](#)):

Yeah.

Kent Holtorf ([49:21](#)):

I love it. I think it's been a great discussion and I think women will get a lot out of it and even just the fact that—hey, they'll speak up! That, hey, because just all their friends have, it doesn't mean it's normal and there's nothing they can do. One person's like, "My doctor says there's nothing he can do." Or, "I took this med and oh my God, it was terrible." A lot of things they do and I think it sounds like the sooner they come in the better.

Betsy Greenleaf ([49:54](#)):

Oh yeah, yeah, don't put it off. There's things that can be done. There's tons of different things that can be done. And you know what? Incontinence pads costs a lot of money and insurance doesn't cover them. Let's put the pad companies out of business! [Laughing]

Kent Holtorf ([50:09](#)):

I like that. I think that should be something on your website. Yeah.

Betsy Greenleaf ([50:12](#)):

Yeah. Yeah.



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Kent Holtorf ([50:14](#)):

That's good. Well, it's been a pleasure meeting you and listening to you. Learned a lot and I think you're doing great work and keep it up. Again, thank you for taking the time to be with us.

Betsy Greenleaf ([50:28](#)):

Great. Thank you so much. It really wasn't honored to be here. Thank you.

Kent Holtorf ([50:32](#)):

Right. Thanks so much.