

Real Health Podcast

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Episode #33: Cryoablation with Dr. Jeanne Stryker, MD, DABR

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Intro: This is the Real Health Podcast brought to you by Riordan Clinic. Our mission is to bring you the latest information and top experts in functional and integrative medicine to help you make informed decisions on your path to real health.

Dr. Lucas Tims, ND, FABNO: All right, everyone, welcome back to the Real Health Podcast. I'm Dr. Lucas Tims, and we are joined today by a very special guest, a colleague of ours, Dr. Jeanne Stryker, who is a medical director... I'm sorry, a medical doctor and board certified fellowship trained interventional radiologist oncologist with an additional specialty in women's imaging. Dr. Stryker, thank you for joining us today.

Dr. Jeanne Stryker, MD, DABR: Oh, thanks so much. It's I'm really happy to be here.

Dr. Lucas Tims, ND, FABNO: We are going to talk a little bit today about a therapy, a very kind of specialized niche if you will, that you have a unique skill set in which is Cryoablation or cryosurgery. Can you just start by telling us a little bit, and our audience a little bit about what Cryoablation is, what the procedure or therapy entails, and the unique way in which you deliver it?

Dr. Jeanne Stryker, MD, DABR: So, Cryoablation is a technique that we've actually been using for the past 20 years. We started with the prostate and with renal cancer, and then we went into different organ systems, such as the liver. I actually applied what I learned in my fellowship to other organ systems that we weren't currently doing back in 2010 and said, if we can do that for the prostate, for the kidney and the liver, why can't we do that for the breast and other organ systems? So I just pulled on that knowledge that I had and put it all together. So Cryoablation typically one of the things that we do is we use image guidance. So we have to see the tumor or the calcium deposits, and then we use imaging guidance. Most of the time I use ultrasound. Sometimes I have to use CT to help guide me in. And we use two different kinds of gases, so that we use argon gas, which is a gas that causes the tissues to freeze to 40 degrees below zero.

Dr. Lucas Tims, ND, FABNO: Wow.

Dr. Jeanne Stryker, MD, DABR: Yeah. And then we freeze. So we have a protocol with the different organ systems, and this is where the art of medicine comes in. So for example, if I'm doing Cryoablation on a breast mass, I typically will freeze for eight to 10 minutes. And then the important step is when we allow it to thaw out and we use helium to increase the temperature in the body so that the tumor that we ablated is thawing out. And that's the important process because that's when you've killed cells and when they thaw out those tumor antigens in other cells are then released into the bloodstream. So then it triggers the immune system to be aware there's trauma going on in the body. And then we do a second freeze for eight to 10 minutes. And the reason we do that is so that the ice ball actually gets bigger. So we're covering more area. So we make sure that we're covering the whole lesion.

Dr. Lucas Tims, ND, FABNO: Sure, sure. And this is, there's a lot going on with this procedure.

Dr. Jeanne Stryker, MD, DABR: Oh yes. Absolutely.

Dr. Lucas Tims, ND, FABNO: Some people may hear cryo freezing and think, "Oh, that seems kind of simple." But there's a lot of physics and technology involved in this stuff.

Dr. Jeanne Stryker, MD, DABR: Right. Exactly. And so that's why it's really important that patients send in not just their imaging report, but their images, because I look at the images and I come up with a plan. Do I need to use one probe? Do I need to use two probes? Because it really depends-

Dr. Lucas Tims, ND, FABNO: Correct.

Dr. Jeanne Stryker, MD, DABR: ... on the size of the tumor. I know there're studies, clinical trials going on out there where they're using a different kind of gas called nitrogen and they are limiting it to tumors that are two centimeters or less. And I want to give patients the option. I don't care if their tumor is 10 centimeters in size, because I have another technique I use for those particular patients. But, it gives me the ability to determine how many probes. And with our probes they're really unique because I can actually dial this, the diameter of the ice fall.

Dr. Lucas Tims, ND, FABNO: Right.

Dr. Jeanne Stryker, MD, DABR: If there's a lymph node that's only a centimeter in size that I'm going to freeze, I can actually dial down to like 1.5 centimeters or I can dial up to five centimeters in size.

Dr. Lucas Tims, ND, FABNO: And just to give the listeners a bit of a picture here, this is, I mean, you're in a surgical suite.

Dr. Jeanne Stryker, MD, DABR: Yes.

Dr. Lucas Tims, ND, FABNO: The patients are under anesthesia or not?

Dr. Jeanne Stryker, MD, DABR: They're under anesthesia. They're under deep sedation, Propofol and Ketamine. And it works really, really well for the patients. They come right out quickly. They don't have a hangover or any side effects, so it's really nice.

Dr. Lucas Tims, ND, FABNO: Yeah. That, that is a real big selling point for a lot of people, I think the reason why a lot of patients may look at this as an alternative. There's, it sounds like you've got so many... You've got a lot of experience with this and there's so many different nuances to it. And obviously it's something that's not new, right? This procedure, this type of therapy's been around for a while. Why do you think it is that most patients, cancer patients for a variety of different types of tumors never really hear about this as an option?

Dr. Jeanne Stryker, MD, DABR: Because we have the standard of care, which is if you have a mass, then the radiologist will send you to an oncologist or a surgeon. Actually they send him to a surgeon and then the surgeon will refer you to an oncologist. And then the oncologist may refer you to a radiation oncologist. And it's frustrating because they are aware of what we're doing, but they seem to forget that. And one of the things I had brought up before when we were talking on the phone, part of my job is to educate you and keep you safe and give you all your options.

Dr. Jeanne Stryker, MD, DABR: So for example, if you went to an OB-GYN, you had fibroids in your uterus, which are not cancerous, they're causing bleeding, the OB- GYN is going to say to you, depending on your age, they can do what they call hysteroscopy and they can look and they can go in and surgically remove the fibroids. They can put you on hormonal therapy. They can tell you to wait till you go through menopause, then you have less estrogen, or they can say, you can get a hysterectomy. They fail to tell you that we can do a uterine fibroid embolization where we cut off the blood supply to the fibroids. And so I'm not sure why they don't tell patients that, but my job is to educate you and give you all your options. And I tell them, I'm not going to take it personally, if you don't choose to go with me. If there's a problem say with traveling, I'll try to find somebody that's in their area that would be amenable to doing this.

Dr. Lucas Tims, ND, FABNO: Yeah. And my first time I heard about cryosurgery or Cryoablation was around 2012, 2013 when I was shortly out of my residency. And we had a gastroenterologist who did a lot of interventional procedures and he was treating esophageal tumors by freezing them. His real interest and excitement about the Cryoablation was not really just the localized effect that you get, but also the systemic effect that you get from it. Can you talk a little bit about how that actually works and the science behind that?

Dr. Jeanne Stryker, MD, DABR: Yeah. So the great thing about Cryoablation versus other forms of ablation, such as microwave or radio frequency, is that because of the cold that's involved, we have found when we freeze that tumor and then when you thaw it out, that's when the cells actually blow up and then they release all of those cancer antigens and other cytokines. Like I had said before, it triggers the immune system. So the immune system now knows there's a trauma going on.

Dr. Lucas Tims, ND, FABNO: Alert. Alert.

Dr. Jeanne Stryker, MD, DABR: Right. Exactly. And then it sends in those special forces, so to speak right. Which are the killer cells, the T helper cells, dendritic cells. So you've got that in the tumor area and also in the local tumor environment. But in addition, because it's going to the bloodstream, the job of those immune cells is to go out and search and destroy anything that looks like those dead cancer antigens.

Dr. Lucas Tims, ND, FABNO: Right. Yeah. And I think a lot of people don't realize that once you get a tumor, a very small size, really, even a one to two millimeter tumor, it already has a blood supply, and there's already going to be some cells shedding off of that and getting into the blood stream. And so even though things might on imaging look like they're contained to just a breast or the liver, we know that there's always going to be some circulating cells and that's the job of the immune system and the rest of our defenses. But they're not always able to detect these cells, right? They're kind of cloaked sometimes. And so this abscopal effect that you are-

Dr. Jeanne Stryker, MD, DABR: Right.

Dr. Lucas Tims, ND, FABNO: ... speaking of, this systemic effect that you can get by increasing the signals that help the immune system better detect circulating cancer cells, that's what you're talking about, right?

Dr. Jeanne Stryker, MD, DABR: That's what I'm talking about. And I'm glad you brought that up because that's one thing I say to patients, I have to freeze beyond the tumor because I can't see cancer cells. And I wish I could see cancer cells. So that's why I freeze beyond it, because I'm assuming that there's probably new cancer cells that are in that region. They just don't have enough number to be able to see that tumor on imaging.

Dr. Lucas Tims, ND, FABNO: Mm. Yeah. That's important. Kind of like a surgeon would take a little bit wider margin. Same idea with the ice ball, you're going to freeze beyond the visible tumor and which makes sure you get the whole tumor, but also produces more of this abscopal effect.

Dr. Jeanne Stryker, MD, DABR: Exactly. And that's one of the reasons why I also do the intratumoral injection of immunotherapy drugs, post ablation when it's thawed out, because, I just say, it's again, it's like if you had a war, you're going to mobilize more people in a war. And so you're mobilizing more of those special forces, which are the immune cells to go out there and search and destroy. And so I always tell patients that it looks like it's bigger, because number one, we're freezing beyond, but number two, you've got an influx of all those immune cells. So it's actually going to look bigger and you've got that inflammatory response.

Dr. Jeanne Stryker, MD, DABR: And one of the other things I tell them, for example, we'll do a follow-up imaging and they'll say, "Well, I didn't have any tumors in my liver," for example. Say, "Well, you actually did." It's because of the abscopal effect, those immune cells have gone into that area and said, "You're not supposed to be here." So they were there and the good news is, this is where patients will follow through with an oncologist and they'll do follow up imaging and they'll say, "Oh, right now you're cured or you're cancer free." And then six months later, a year, two years out, they do follow up imaging and now you have something in your liver. Where with the abscopal affect, we see that right away, which is good because you're not waiting two years and you can intervene immediately.

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Dr. Lucas Tims, ND, FABNO: Yeah, yeah. Which is huge. And like you said, to the untrained professional, they may look at that as a different story, a different process happening. And so it's important for patients to understand what we expect to see from these procedures. And I love the way... So just to recap, you're freezing the tumor. There's a couple of freeze thaw cycles. And then after that second cycle, you inject or infuse, profuse them with an immunotherapy agent.

Dr. Jeanne Stryker, MD, DABR: Right. So I use the imaging that I use for Cryoablation and I watch my needle go in and the immunotherapy and the outer portion of the dead tumor, because it's, again, it's like, you're mobilizing more of those immune cells to come in and do the job.

Dr. Lucas Tims, ND, FABNO: Yeah. It makes so much sense. It almost seems too sophisticated. I wonder why are we not taking advantage of this? It really does paint the picture of a nice blend of using the best technology available with the body's ability to heal and the immune system's ability to do its part in the battle as well.

Dr. Jeanne Stryker, MD, DABR: Correct. And that's where you come in because I always tell patients, I'm functioning like a surgeon in terms of killing the bulk of the tumor, but you still may have those circulating tumor cells and you need someone to address that.

Dr. Lucas Tims, ND, FABNO: Right. Yeah. And we always get a baseline, or ideally we want to get a baseline on patients with their circulating tumor cells, with their immune function, with all the other markers that we like to see, to make sure that going into that procedure, that ablation, that we have those baseline markers, but more so that we've primed people to have a great response. And that the immune system in those troops you were talking about are there and raring to go.

Dr. Jeanne Stryker, MD, DABR: Right. Exactly. And that's why sometimes we'll put patients on like cyclophosphamide, which is... but a low dose. And what that does is before the procedure, mobilize more of the forces so they have a better outcome.

Dr. Lucas Tims, ND, FABNO: Yeah. And that's a chemotherapy drug that's been around for a long time, but fallen out of favor and sort of looked at as sort of a repurposed chemo drug now at this point.

Dr. Jeanne Stryker, MD, DABR: Right.

Dr. Lucas Tims, ND, FABNO: That's interesting that you use that. Yeah. Tell me a little bit more about how you came to that. To using that in your routine.

Dr. Jeanne Stryker, MD, DABR: Well, because I had a great guy who I talked to early on, he had been doing this for a long time. And again, it's part of the art of medicine when you start to think about things and you're like, "You know, I don't really want to go after something really big because I may put this patient into a crisis." They call it the tumor lysis syndrome where you have too many inflammatory cytokines that are released and it can put the into a crisis. But I was talking with him and he was doing some of the immunotherapy drugs that early on, and because he's brilliant he realized that a low dose cyclophosphamide would help enhance the white blood cells.

Dr. Lucas Tims, ND, FABNO: Gotcha. Gotcha. And you've seen that obviously in your own practice make a difference.

Dr. Jeanne Stryker, MD, DABR: Absolutely. Absolutely.

Dr. Lucas Tims, ND, FABNO: That's great. My hope is that moving forward with all that we've learned both on the traditional side, the integrative side, that we start to look at all these things as just tools that can be used and more getting back to that art of medicine that you talked about where it's not a cookie cutter approach to everything and we do what makes sense for each person. And every protocol can be individualized.

Dr. Jeanne Stryker, MD, DABR: Right. Exactly. I don't practice population based medicine and you have to listen to the patient, because some patients are sensitive. Or they have the genomic profile where they're not able...

Dr. Lucas Tims, ND, FABNO: Right.

Dr. Jeanne Stryker, MD, DABR: ... to detoxify adequately, so you have to help them. And I always tell patients, we want to get as much information as we can because there's a missing piece of the puzzle and we want to find that missing piece. Because then we have a clearer picture of what's going on.

Dr. Lucas Tims, ND, FABNO: Yeah. Well said. Who's a good candidate for cryoablation? Obviously we're talking about this in the context of managing malignant tumors. I know there's some non-cancer based indications for it, but speaking specifically to patients with cancer, who are good candidates for this procedure?

Dr. Jeanne Stryker, MD, DABR: I see anybody and I'll do any case as long as it's below the clavicle or the collarbone. I mean, I've done some thyroid lesions. It's tricky because you've got the carotid artery there and you've got the jugular vein and those are pretty... You hit those, it's not a good thing.

Dr. Lucas Tims, ND, FABNO: Yeah. Can run into some issues there for sure. We're not just talking about treating primary tumors, we're talking about recurrences, metastatic tumors.

Dr. Jeanne Stryker, MD, DABR: Absolutely. Yes.

Dr. Lucas Tims, ND, FABNO: All the above.

Dr. Jeanne Stryker, MD, DABR: Yes. But one of the things that I always tell patients is that we're going to go after the primary because the primary is the culprit. And if you don't destroy the primary, it's going to keep releasing those cancer cells. You go after the primary first and then you can go after the secondary, which is the metastasis.

Dr. Lucas Tims, ND, FABNO: Yeah. I think it's refreshing, but also unique to hear a doctor that has the training you have and is more of someone who's in the operating room a lot, have this understanding and this grasp of the immune system and what patients can be doing to support their bodies before and after your procedure. How do you see yourself fitting into an integrative oncology team?

Dr. Jeanne Stryker, MD, DABR: Well the way I fit in is that they'll refer to me when they know that the tumor is not reacting to the systemic therapy. And then understanding that what I do is creating really their own personalized vaccine that stays within the body. So if we were going to look at it from the

standpoint of a standard of care, I would be the equivalent to a surgeon. You're like the equivalent to an oncologist taking care of the patient systemically and we're in communication with each other. I just follow up with patients after procedures, with the imaging in the labs, because things look a little distorted and most radiologists don't really know what's going on and they may misinform patients like, "Oh my gosh, it's growing, it's bigger." And not understanding that a lot of that is inflammation and as time goes on, that goes away. So that's why I like to look at the imaging myself and I go over them with the patient.

Dr. Lucas Tims, ND, FABNO: Yeah. And we've had a lot of patients that we've shared where I really appreciate that, because you don't always get that follow up even from a traditional surgeon. And you work with a lot of integrative doctors, naturopathic doctors, naturopathic oncologists, what has been your general experience working with more outside the box doctors like us?

Dr. Jeanne Stryker, MD, DABR: Well, I don't even like that term outside of the box because I just think what we're really doing is we're practicing medicine the way we were taught. And it's the science and art of medicine. So we're, integrative doctors, are using the tool, the art of medicine and looking at patients uniquely. And we know more about that patient because we're listening to them. So I like working with people that are like-minded and our first and foremost, our priority is the patient. And how can we move together to help this patient out? Are we missing something? And that's where I love where I can like with you, I picked up the phone, it was a mutual patient and you know, I had made some recommendations. You were in agreement. So when a patient hears two different clinicians that are in different parts of the country that are in agreement, it makes the patient feel like they're being taken care of behind the scenes.

Dr. Lucas Tims, ND, FABNO: Yeah. I couldn't agree more. That team aspect and making sure that everyone's on the same page, that really builds a lot of confidence and trust with the patients.

Dr. Jeanne Stryker, MD, DABR: Exactly. Exactly.

Dr. Lucas Tims, ND, FABNO: Makes the whole relationship stronger and the actual work that needs to be done a lot smoother. So I just want to say thank you for being such a great collaborative type physician and being able to offer such unique skillset in treatments. I wish there was more doctors like you, but you are a rare breed. Tell me a little bit about sort of where patients can read more about you or where they can find you online.

Dr. Jeanne Stryker, MD, DABR: So they can go to my website. It's strykermd.net. S-T-R-Y-K-E-R M-D, like medical doctor, .net.

Dr. Lucas Tims, ND, FABNO: Md.net. Perfect.

Dr. Jeanne Stryker, MD, DABR: ... Facebook, and we have an Instagram account. So I've got images up there. But the website has a lot of videos, so they can get an idea of what it means to do an embolization where we're starving the tumor by cutting off the blood supply or Cryoablation immunotherapy. And we also have a couple patients that are on the videos that gave their own testimony, what they went through and what kind of cancer they had. And I am coming out with a book, it should be published before the end of the year, with my things that I've gone through, the many different patients I've seen. And one of the things I wanted to bring up too is that I listen to these

patients because a lot of times they teach me. Like, "Wait, wait. What are you doing? What's that? Let me write this down." Because that's helpful for me to be able to tell their patients that.

Dr. Lucas Tims, ND, FABNO: Yep. Yep. Yeah. I learn things from my patients every day and you know, I think it takes the right mindset and type approach from a doctor to be willing to learn something from their patients. And so we need more of that. I'm glad to hear that that's a regular practice of yours. Maybe just to wrap things up here we always like to ask our guests this final question. And it's kind of in keeping with the name of the podcast here, but what does real health mean to you, Dr. Stryker?

Dr. Jeanne Stryker, MD, DABR: So real health, again it's individualized and that's a journey that you have to take to figure out, yourself personally, and then how you interact with your environment. So for example you find out like we talked about with the genomics and are there certain enzymes, genetic enzymes that you're missing, that you find out you're missing those genetic enzymes. And it's not a death sentence. It's like, "Okay, well." Like for example, if you're missing the enzyme to activate your glutathione, the good news is you can take something like an acetyl glutathione and that helps you with detoxification.

Dr. Jeanne Stryker, MD, DABR: And then just knowing, and I don't use this in the traditional form, but I think that part of the blood type definitely has something to help us out with... So knowing that, because the blood type also has to do with your genes and does your body have the proteins, the enzymes to break down certain things. So it's like eating healthy. Is it plant based? Is it grain free? Or are you somebody that needs more protein in your diet? Definitely you need the sunshine. You're going to have to supplement today. Even if you're eating organic, because the soil today is depleted of minerals and vitamins that we take in.

Dr. Jeanne Stryker, MD, DABR: Also, if you've had prior trauma, I say, you've got to find the right person to help you get rid of that trauma. Because I always say to patients also, the body doesn't know if it's physical trauma, spiritual trauma or emotional trauma, it just knows there's trauma and there's a memory. But if you get in there and you work on that, then that memory, either it fades away or it no longer is, so you have addressed that. I mean, again, there's then a healthy lifestyle in terms of exercise. And I always tell patients do what you love to do because when you stop moving, nothing good happens.

Dr. Lucas Tims, ND, FABNO: Wow. So many great nuggets there. That might be one of the best answers I've heard so far. Thank you. And I couldn't agree more. I think we'll wrap up there. Thank you so much for joining us, Dr. Stryker. Again, strykermed.net is the website. Find her on social media and thanks again for being with us today.

Dr. Jeanne Stryker, MD, DABR: Hey, my pleasure. Thank you so much.

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