Devorah Silverm...: Okay. Let's get started, everybody. Welcome. Thank you for joining us tonight to explore the latest in post-mastectomy reconstruction decisions. Before we begin, I have a few housekeeping items to cover. First, for those of you who don't know me, my name is Devorah Silverman and I'm the Chief Operating Officer at Sharsheret, Melissa Rosen, who moderates many of our webinars will be joining us tonight in a different capacity and she'll manage the Q&A session at the end of our webinar.

I want to thank our generous sponsors, Miami Cancer Institute, Daiichi Sankyo, Merck, and the Cooperative Agreement, DP-191906 of the Centers for Disease Control and Prevention. Their generosity allows us to continue to offer important support and educational webinars such as tonight's program. I'd like to remind you that tonight's webinar is being recorded and will be posted on Sharsheret's website along with a transcript. Participant faces and names will not be included in the recording.

You also have the option to be anonymous during today's live webinar. The instructions for how to do that are in the chat box now. Additionally, we have closed captions available who we need to find ... Okay, that's better. We have closed captions available. The instructions to activate them are in the chat box now.

We received a great number of important questions through the registration process, but as questions often arise during presentations, we want to invite you to use the chat box to ask them and we'll have our speakers address as many as possible during the Q&A session toward the end of the webinar.

It's my pleasure now to note that Sharsheret has been providing telehealth services to the breast and ovarian cancer communities for over 20 years because we recognize that cancer is much more than simply a physical experience. And as we move into the webinar itself, I also want to note that Sharsheret is a national, not-for-profit cancer support and education organization and does not provide any medical advice.

The information provided by Sharsheret and by tonight's speakers is not a substitute for medical advice or for treatment for your specific medical condition. Please do not use the information provided to diagnose or treat a medical health problem. Always seek the advice of your physician or a qualified health provider with any questions you may have regarding your own condition.

We have a lot to explore tonight, so let's get started. Deciding how and if to rebuild your body post mastectomy is a significant and not always simple decision. For some, presenting to ourselves and the world as we did before diagnosis is important. For others, the thought of additional surgeries may be overwhelming.

Luckily, tonight, we have three outstanding experts with us to provide you with important information to help make decisions after your initial surgery, even if that was years ago. But before we get to the medical professionals, I want to welcome Melissa Rosen to the screen, not as moderator as I mentioned, but as tonight's caller to share her personal story. Melissa.

Melissa Rosen: Thank you so much, Devorah. I'm really excited to be here tonight actually in this capacity, this isn't my usual place. But as Devorah said, I realized as we were planning this webinar that my story might help some of you making these decisions. I've had some experience with all three of the options the doctors will be presenting on this evening.

So when I was diagnosed with breast cancer 10 years ago, it became clear I would need a double mastectomy. Because I did not need radiation, I was strongly encouraged to make my reconstructive decisions before my mastectomy. So I went with a friend for support and comfort to three different plastic surgeons.

The one I chose would work alongside my breast surgeon during the mastectomy. I made the rounds. I chose my doctor and decided I would get an autologous reconstruction, one from my own tissue. I was sure that personally I did not want anything foreign put into my body and I was enticed by people calling it a boob job and a tummy tuck.

Lesson number one, a mastectomy and reconstruction is never cosmetic surgery no matter how many people try and tell you so, so prepare appropriately. During my first official visit to the doctor I chose, the plastic surgeon I chose, I learned in fact that I was not a great candidate for autologous reconstruction. Tonight, Dr. Levine will tell you that things may have changed since then, but for me at that moment, a decade ago, flap surgery was off the table.

My doctor, without missing a beat, without a second for me to process that disappointment, brought out two sets of implants for me to choose from. Lesson number two, things don't always go the way you want or you had hoped in this process, learn to roll with the, there are other options. But in retrospect, I am disturbed about how quickly I agreed to something I did not believe was right for me just a day earlier.

We all know that the diagnostic period can be really overwhelming, and I allowed myself to be led in a different direction too easily. I know I just told you to roll with the punches and I stand by that, but lesson number three, take a pause when needed. I could have gotten another opinion. I could have asked for some time to think about it. At that time, I did not even know that aesthetic plaque closure was an option.

After that pause to research and process, I could have rolled with the punch. In the end, I had my surgery, I got gel textured implants, but the side that had

active cancer had problems immediately, and by immediately, I mean before I even made it to the recovery room. The other side healed beautifully and behaved exactly like it should, but my cancer side took well over a year to heal.

I had problem after problem. It may be that the same reasons I wasn't a great candidate for the autologous reconstruction were also complicating my plan B. Around the same time that I was finally healed or at least as healed as I was going to be, the FDA announced that my implants had been recalled. An addendum to lesson number three, sometimes the punches come later than you anticipated, but you still need to roll with them.

I went back to my plastic surgeon and I asked him to remove them. I had a few reasons why I wanted them removed, but the FDA announcement to me was the final straw. On that day, I learned about what some call flat denial. I was told he would do it, but he had never done an aesthetic closure before. I was told he would do it, but he was really sure I would not be happy with the way I looked.

This time, I told him I needed time to think about it. I went home and I researched and I thought, and I researched and I thought. I needed another opinion. I found my current plastic surgeon on a list dedicated to doctors who perform what is called aesthetic flat closure. Full disclosure here, the doctor I found is one of tonight's presenters, Dr. Bunowitz. He listened to my concerns and agreed to move forward with me.

I had my implants removed and a beautiful closure completed, and I actually found that for myself, I am far more comfortable without the reconstruction than with it both physically and emotionally. Lesson number four, educate yourself and know what's right for you. Cancer removes so many choices from us, but when there is a choice, take advantage of it and do your best to go through this experience empowered.

I just want to make it clear that the decisions I ultimately made were good for me. Others will choose other paths, and those decisions will likely be good for them. Tonight, I shared just a little bit about my personal experience. I didn't even have time to go into all the factors that led to my ultimate decision, and you know what?

They really don't matter because each of us have our own factors that will lead us to the decisions that we will make regarding reconstruction, but knowing that it's an overwhelming time and a complicated decision, I simply ask that you make your decisions not out of fear, not based on what others want for you, but from a well-informed medical perspective that also takes your feelings and beliefs into account. I'm really excited to hear tonight's speakers, so thank you for listening to my story and let's get back to the speakers.

Devorah Silverm...: Melissa, thank you so much for sharing so candidly and so openly with all of us. Your story is inspiring and so are you. So, thank you. It's my pleasure to introduce our other speakers for this evening. Dr. Brian Bunowitz is the Emeritus chief of plastic surgery of Abington Hospital in Pennsylvania.

Dr. Bunowitz has devoted service to the hospital and community for over 30 years. He's a clinical instructor at Temple University in the division of plastic surgery for the School of Medicine and Surgery. Bunowitz is also co-founder and past director of the Comprehensive Wound Healing Center at Abington Memorial Hospital and associate medical director for Praxis Clinical Services.

He's board certified by the American Board of Plastic Surgery and holds certifications from the American Board of Surgery and the American Board of Preventative Medicine in wound care and in hyperbaric medicine. Dr. Bunowitz endeavors to deliver the unique optimal solution for each and every patient knowing that no two are exactly alike.

And he'll be speaking this evening about aesthetic flat closure Dr. Joshua Levine is a graduate of the Medical College of Georgia and completed general surgery and plastic surgery residencies at the Albert Einstein College of Medicine. He also completed a fellowship in cosmetic surgery at the New York Eye and Ear Infirmary and a fellowship in Microsurgical breast reduction at LSU in New Orleans

Dr. Joshua Levi...: Reconstruction.

Devorah Silverm...: Excuse me?

Dr. Joshua Levi...: Reconstruction, not reduction.

Devorah Silverm...: Oh, I'm sorry. Thought I said that. Since 2004, Dr. Levine has dedicated his practice exclusively to perforated flap reconstruction establishing centers throughout the Tristate area. Dr. Levine introduced the increase eye gap pioneered MRA perforator mapping proved the safety of MRA in patients with expanders and implants and codified and refined the stacked hemi-abdominal extender-perforator shape flap.

Dr. Levine continues to develop novel combination flap procedures. Dr. Levine will speak this evening with us about autologous breast reconstruction, which is reconstruction using the patient's own tissue. And finally, Dr. Harry Salinas is a Miami Cancer Institute plastic and reconstructive surgeon who specializes in breast reconstructive surgery.

He utilizes advanced surgical techniques to extend the ability of other surgeons and radiation oncologists to more effectively treat cancer, thus offering patients the best opportunity for cure. He also performs surgical procedures that restore

physical function and improve a patient's appearance and quality of life after the surgical treatment of cancer.

Dr. Salinas research interests have included fat grafting, adipose-derived stem cells, and improvement of venous conduits for arterial reconstruction. He's an experienced clinical educator serving as a clinical fellow of surgery and an anatomy instructor at Harvard Medical School and as an anatomy and physiology teaching assistant at Mount Sinai School of Medicine.

Dr. Salinas will be speaking about implant breast reconstruction. We'll begin with Dr. Salinas then have Dr. Levine present, and finally, Dr. Bunowitz will discuss going flat. Dr. Salinas, the floor is yours.

Dr. Harry Salin...: Hi, thank you for having me. That's an old bio of mine you have, but I'll take it. Let's see. Let me share my screen here. There. Okay. All right. Can you all see this and hear me?

Devorah Silverm...: I can hear you, but I do not see your screen.

Dr. Harry Salin...: You do not see my screen. All right, that's a problem.

Devorah Silverm...: While Dr. Salinas is getting that up, a reminder that if you have any questions, please put them in the chat box.

Dr. Harry Salin...: How about now? You see the-

Devorah Silverm...: Yes.

Dr. Harry Salin...: You do. Great. Okay. All right. So I'm going to talk to you about implant-based reconstruction, and obviously this is a topic that we can spend five hours talking about. I'm going to try to compress this into a 15-minute little thing to give you an idea of what we can do with implant-based reconstruction, which is obviously not for everybody, and there are pros and cons to whichever route patients choose.

Just for disclosures, I have no financial disclosures, all the patients you're going to see are mine and they're all consented for this. And every post-operative photograph I'm going to show you here are at least six months out from surgery. Generally, there's two ways to do implant-based reconstruction. You can go over the muscle or you can go under the muscle.

The under the muscle technique that's done today, it's more appropriately called a dual plane because in the old days you put the device completely under the muscle and then expand the muscle. Today we release it and we put a sling of biologic mesh inferiorly so that the top of the implant is covered by muscle, the bottom of the implant is covered by biologic mesh.

And as a general principle, and I'll tell you why I like doing a two-stage implant-based reconstruction with fat grafting on the second stage, and I'll give you my rationale as we go through this few slides that I put together. Why do I like to put the implants under the muscle? There's no right or wrong here. Patients always come into the office and say, oh, my friend told me it's better over the muscle.

My other friend told me it's better under the muscle. The honest answer to this is that it's a give and take. I like my reconstructions under the muscle. Why do I like them under the muscle? Because the muscle puts pressure on the upper pole of the breast, and all I use are smooth round implants because the textured implants have been removed off the market because of the issue with the breast implant associated and a plastic large cell lymphoma.

When you're using a smooth round implant and you have that implant in that dual plane position, the muscle puts pressure at the top and it kind of gives the breast a bit of a teardrop shape despite the fact that you have a round device. The muscle is an excellent bed for fat grafting in that second stage where I exchange the expander round implant and you utilize half of the ADM, the implants that go in front of the muscle. ADM is acyl or dermal matrix.

It's biologic mesh that's derived from human tissues, and when you go in front of the muscle, you have to typically cover the whole device with ADM and you're using twice as much materials. And this is also a consideration. What are the downsides of being under the muscle? So the main downside is the animation deformity.

It's the fact that when the muscles flex, you'll see some movement of the implant. And we go over the pros and cons. For many years I did in front of the muscle reconstructions and in my experience when those patients were out long-term two, three, four years out, I would get either rippling in the super remedial part of the breast, which is really hard to hide, particularly when you live in Miami and you're in a bathing suit frequently or you get that stuck on half orange look where you see all the contour of the implant up at the top.

And I wasn't really happy with my long-term results. So I went back to the more traditional dual plane position. And all of these patients are dual plane and they all have smooth round implants. And if you look at the top of the breast, they have somewhat of a teardrop shape even though they have a round device, and at least in my hands, I can only accomplish this with a dual plane position with having the muscle up at the top.

There's two ways to do implant-based reconstruction. You can either do the more traditional expander and then an implant or you can go directly to an implant. And just like the behind the muscle or in front of the muscle conversation, there's no right, there's no wrong, there's no better way, there's no worse way. We all have different ways of doing this and in our hands, you

may get a good result with either route and I may do it different than Dr. Levine and somebody else.

I like an expander to implant exchange, an expander first and then an implant. What are the downsides to this? Well, you're committing to two operations right off the bat. I like the fact that I can perform fat grafting in the expanded implant exchange procedure. I like the fact that the patient has full control of the size, so I don't have to choose for them.

They can choose how much volume they want as we are filling the device in the clinic, and this is debatable, but I think there's plenty of literature to suggest, and in my own experience, the complication rates are lower because you don't have a fully inflated device under the skin that's just had a mastectomy. That skin is fragile, that skin has very bad blood supply. That skin takes two weeks to recuperate and normalize.

When you put a device that's less inflated, you have less pressure on it, you're going to have less complications of the skin. But it does require multiple office visits for expansion. The expander is stiff, it's uncomfortable. So there are plenty of downsides of doing it this way. When you go directly to an implant, the revision rate is high in terms of they're mostly related to implant malposition.

It's much more common to have an implant that's bottomed out or that's lateralized, and I'll show you how I deal with that in a second. And your implant size is almost always going to be the original size of the breast or slightly smaller because we're all trying to prevent skin complications when we do that. But you avoid the discomfort of the expander and you could potentially be done in one operation.

Although things are seldom perfect after one operation and a direct to implant, at least in my hands. I like fat grafting as an adjunct to implant-based breast reconstruction. The fat is harvested with liposuction. We process it to remove the fluid and then I usually use this to bulk soft tissue envelope around the implant and to smooth out the transition from the chest wall to the implant because the mastectomy will take tissue all the way up to the clavicle, but the base width of the implant doesn't get anywhere close to that.

So there's usually a deficiency of tissue above the implant. About half of the fat we inject will get reabsorbed and you'll retain half of it. So this is generally speaking, my pathway for all of these patients, and I don't have to bore you with this video, but this is to show you that on one side she's fat grafted, the other side, she's not. And you can see a big difference in the contour right above the implant in terms of seeing the upper boundary and having a nice smooth transition on the chest wall to the implant.

And that's what we utilize the fat for. Over the years, I've focused a lot on establishing good boundaries for the reconstruction because the

reconstructions that don't have a good aesthetic outcome in my opinion are because the boundaries are not well-defined. The implants are either too low or they're sideways.

And I'll put a lot of time and effort into getting good boundaries and trying to prevent these kinds of reconstructions where the implant's bottomed out and you have abdominal skin up on the implant and you have a lot of hollowing above the implants. And I see a lot of patients for revisional surgery that come like this from other places.

I secure my boundaries when I put my expander and I like an expander because the expander is sewn to the chest wall and it just stays where I put it and everything heals around it and I get a lot less bottoming out or lateralization of the devices. So if you look at these patients that I did after doing five, 600 breast operations every year, these few cases I'm showing you now are cases that I did much later once I learned to control the boundaries, once I stopped doing the direct to implant operations and I went to expanders.

I don't have abdominal skin on the breast. I have a nice set floor for the implant to sit on and it sits in a nice anatomic position and we can get nice cosmetic outcomes at a breast reconstruction. A breast reconstruction patient doesn't have to look reconstructed. All these patients look like cosmetic operations. And when we can do a nipple sparing mastectomy, which is not possible in everybody, but nowadays, it's possible in most patients, you get nice cosmetic outcomes.

And that's important particularly in a city like Miami where people are often, it's hot here and people go to the beach and they're in bathing suits and these patients want to have the probability of coming out with a nice aesthetic reconstruction. How do I deal with the bottoming out? This is more for ... it's a little bit more medical than maybe needs to be, but this happens late.

This doesn't happen right away. So you can see this patient looked great a month after the expander exchange and then she bottomed out. We usually do an internal, do something called Orion flap and reestablish the boundaries of the pocket and it's sort of like an internal underwire and you can see it done on the left side and not on the right side here.

And these things can be solved. And these are the first couple of patients I showed you after addressing their bottoming out and bringing the implant to a better position. You can see there's much less hollowing above the implant just by the fact that we've moved the implants north and have given them a solid stable floor. That's the other lady that I showed you at the beginning.

And sometimes we reinforce the tissues with some absorbable synthetic meshes to prevent the skin from stretching out because sometimes it's a problem with the skin stretching out rather than the boundaries moving on you.

And you can get really nice cosmetic outcomes revising patients this way. And the patients that are droopy that have a large breast, that have a low nipple, those aren't patients where we can do nipple sparing mastectomies.

So the way I handle these patients in my practice, I either will stage them, meaning we will do a lumpectomy or multiple lumpectomies and then lift the nipple and reduce the skin envelope and then come back six or 12 weeks later to do the mastectomies or we will just reduce the envelope into an inverted T and remove the nipple.

So this is an example of a staging procedure. This is a patient where the left breast is big and the nipple is low, and in order to control the skin envelope in the nipple position, we do a reduction lift first. And that picture is not more than six months out because this patient, we only waited six weeks to go back in.

And then after we do the mastectomy and the reconstruction, we were able to preserve a nipple that we may have not been able to preserve otherwise because the breast was too big and we can get people through it. This is another example of the same thing. These breasts are too big, they're too low for you to do an nipple sparing mastectomy because the skin envelope, it just, if you do a nipple sparing mastectomy on something like this, either the nipples will die or they end up in the wrong place and you cannot do a lift after you do a mastectomy.

So in doing a staging operation, which does put the patient through an additional procedure, you can get a nice cosmetic outcome after the mastectomy on the reconstruction. This is another example. We do this a lot in patients with genetic mutations, for example, because there's no time pressure, we can take our time and prolong the process.

So this is done in my practice for every bra cup, or CHEK2 mutation PALB2 mutation, whatever genetic predisposition. I rarely if ever remove a nipple for a prophylactic mastectomy. And when we can't conserve the nipple for a variety of reasons, advanced tumor or there's just too many tumors for us to be able to stage them or the patient doesn't want to have an additional operation, then we do a wise pattern mastectomy with an implant based reconstruction.

This is a patient that had that done on the left side, the right side is a lift with an implant for symmetry. And this is a patient that had that procedure done on both sides. And then what we do is we reconstruct the nipple and then tattoo the areolar pigment.

So implant based reconstruction is a multi-step process. To me, reconstructive surgery, if you're going to do it well and you're going to expect a nice cosmetic outcome, it doesn't get done all at once. The same goes for nasal reconstruction or for breast reconstruction. And I really think a step-wise kind of approach to these things provides a much better outcome. So I tell my patients, this is a

process. We're not going to get this done in one operation. You're going to be coming here for six months if you want these kinds of results.

If you just want volume and a device there, sure, we can do that in one operation, no problem. But if you want a real cosmetic outcome, at least in my practice, this happens over a sequence of procedures. I like a traditional expanded implant exchange. I get lower complications, I get a more predictable outcome with it.

I like injecting fat around the implants. I get a better teardrop and I get a better transition from the chest wall to the implants. And I think if you're really shooting for a nice cosmetic outcome, then revisional surgery is expected, two, maybe three operations. So that's all I have for you for implants, and I'm happy to answer whatever questions you have at the end.

Melissa Rosen: Devorah, you're muted.

Devorah Silverm...: Thank you so much. Dr. Salinas. We will invite Dr. Levine to present. Thank you.

Melissa Rosen: Dr. Levine, you're muted.

Devorah Silverm...: We can't hear you. You're still muted.

Dr. Joshua Levi...: I keep getting an unmute.

Devorah Silverm...: There we go.

Dr. Joshua Levi...: Okay. You got me now?

Devorah Silverm...: Yes.

Dr. Joshua Levi...: Okay. Thank you. Thank you, Devorah. Thank you Melissa for sharing your story. It's a story that I've heard many, many times before, and so I think it's just incredibly important and valuable to have this seminar because I would like to echo your comment that information is good. Second opinions are vital. Sometimes third and fourth opinions are necessary.

And the more information that you can get, the more power you will have to make a decision that is appropriate for yourself. So let me just introduce myself by saying that again, my name is Joshua Levine. I'm here in Manhattan, and I am a reconstructive micro-surgeon, which means that I'm a plastic surgeon, but I only do breast reconstruction and I only do a certain type of breast reconstruction, which has a couple of different names that I'm going to explain to you because in order to really understand the options, you really have to familiarize yourself with a lot of terminology, unfortunately.

So let me start by saying that there are two types of breast reconstruction, broad categories. Dr. Salinas just gave you a brilliant overview of what you can expect if you choose to have the one type of breast reconstruction, which is called implant-based breast reconstruction. The other main category of breast reconstruction is called autologous breast reconstruction.

And that's a very broad category also, which basically just means that you're using your own body tissue to recreate or reconstruct a new breast after mastectomy. Now I'm going to get into a little bit more detail about that and zero in on a certain type of autologous breast reconstruction called perforator flap breast reconstruction. But let me go to the next slide. Can I do that or are you going to do that for me?

Devorah Silverm...: I'll do it.

Dr. Joshua Levi...: Okay. Can we go to full screen on that?

Devorah Silverm...: It is full screen on my screen.

Dr. Joshua Levi...: Oh, okay. I'm seeing the viewer view, but all right, so let's go to the next slide. I'm still looking at the first slide.

Devorah Silverm...: Melissa, yeah, we're not seeing the slides advance.

Melissa Rosen: Huh.

Dr. Joshua Levi...: I guess I should just do it on my computer, huh? Would that be better?

Melissa Rosen: I'm going to stop the share. While we're getting those up, remind you that if you have questions, we're making note of them to ask at the end, please put them in the chat box.

Dr. Joshua Levi...: All right. Give me one second here. I've just got to find the presentation. Here it is. Okay. Now I'm going to share my screen. How are we doing there? Can you see that?

Devorah Silverm...: We see something on your computer that is not your slides.

Melissa Rosen: Okay. The only thing I see on my computer is my slides.

Devorah Silverm...: Devorah, are you seeing anything different? No, I'm not seeing the slides either.

Dr. Joshua Levi...: It says I'm sharing my screen and ...

Melissa Rosen: Do you have multiple monitors? It might be the other one.

Devorah Silverm...: Yeah, it's just a list of files.

Dr. Joshua Levi...: All right, let me close all that stuff and see if that helps. Sorry about this.

Melissa Rosen: The other option is to have Dr. B present now and then have you close us out. The decisions were made on the alphabet and not anything else.

Dr. Joshua Levi...: Yeah, I'm not really sure why this is. Oh, one sec. That looks good. There we go.

Melissa Rosen: Oh, there we go. Yes.

Dr. Joshua Levi...: Okay. Okay, cool. Great.

Devorah Silverm...: Perfect.

Dr. Joshua Levi...: Good. I got it. Okay. Okay. So what is a perforator flap? That's the title of my talk today because I'm going to be talking, as I said initially about autologous breast reconstruction, but specifically one type of autologous breast reconstruction called the perforator flap. Again, the two types of breast reconstruction, as I said, are implant and autologous, but you're also going to be hearing tonight about another option which is called the flat, F-L-A-T closure.

One distinction I'd like to make right off the bat is that when we talk about autologous options, we're going to be talking about something that we call a flap with a P at the end F-L-A-P. And so that's one of the terms I'd like for you to learn. So all of the operations that I mentioned to you tonight can generically be called flaps, F-L-A-P, as opposed to flat.

Some of the common flaps that you might've heard of include the tram and the latissimus, and then you get into the perforator flaps, which I'll be describing in more detail. But the tram flap is something that preceded the perforator flaps. It's not really done that much anymore, at least not in the United States because the advancements that we've made in microsurgery have replaced the tram with the perforator flaps.

And I'll explain exactly why that's the case in a minute. The latissimus flap is another flap that you might've heard of, and that is actually one that's still done quite commonly, but usually it's done in conjunction with or in combination with an implant reconstruction. So just to review, a flap again is an autologous breast reconstruction.

In other words, it uses the patient's own tissue to bring living natural tissue into the chest to either reconstruct the breast by itself or in the case of the latissimus, with an implant. Now, the flaps that I've mentioned, the tram and the latissimus are by definition what we would call muscle flaps. And what that means is that a muscle has been used and therefore sacrificed in order to reconstruct the breast.

And giving up a muscle is never a good thing. And when you're talking about the tram, you're talking about the rectus abdominis muscle, which is a big muscle in the anterior abdomen. It's the six-pack abdomen muscle that you see on bodybuilders. And when you're talking about the latissimus, it's the big muscle in the back that's responsible for arm rotation. So it would be preferable, obviously, to do a reconstruction without destroying a muscle.

And the fact is that you really don't need the muscle to make a new breast. The only reason that the muscle was ever used is because of the simple basic anatomic fact that if you want to move living tissue around in the body, it absolutely has to have a blood supply or blood vessels flowing through it. And before we figured out how to do the more advanced perforator flap surgeries that I'll be describing, the only way to get the tissue up to the chest, the tissue that you want to make a breast, which is basically skin and fat, the only way to do that was to take along with it the underlying muscle that contained the blood vessels that supply that tissue.

Now, we have gone beyond that with the perforator flap, and I've listed a couple of those there that you may have heard of. The most common one is the DIEP, and then we also have others from other parts of the body, which I'll describe in a minute. I've got up there the GAP and the PAP flap, which I'll describe in a minute. So just to go back over the history, one more time to reiterate, it started in autologous breast reconstruction with the tram.

And again, the tram is a technique by which we are able to move a large volume of living skin and fat to the chest, but it requires that the muscle is sacrificed and the tissue that you're moving is basically attached to the muscle and it's swung up into the chest so that it continues to have those same blood vessels flowing through it.

That's the tram. This is history. Now, the DIEP is a tremendous step forward. It's an improvement on the tram, but you can think of it conceptually as basically the same operation without the sacrifice of the muscle. So the DIEP is everything good about the tram and nothing bad about the tram. And what I mean by that is that we're taking only the tissue that we want, only the tissue that we need to make a breast, which is skin and fat.

It's living skin and fat, but we're taking with it not the muscle, but now we know how to get the blood vessel that supplies that tissue out of the muscle. We use microsurgical techniques to do that. And then we're taking skin and fat and the blood vessel that supplies that and transplanting it into the chest.

We do not have to sacrifice or destroy the muscle, and we call this operation the DIEP because we're naming it after actually the blood vessel that supplies it. And in this picture you can see that blood vessel down by the groin. It's called the DIEP inferior epigastric perforator.

So you may notice that every operation that I talk about has a P at the end, and that P stands for perforator. And that's why another name for these autologous microsurgical breast reconstructions is also perforator flaps. So the DIEP is a perforator flap. The P stands for perforator. And the reason we call that a perforator is because it actually does perforate through the muscle that we're preserving.

And what we do is we find that vessel with sophisticated angiography preoperatively, and then we find that vessel intraoperatively with microsurgical techniques. Then we dissect very gently that blood vessel that perforator, out of the muscle, and then we take again, only the tissue that we want, skin fat and blood vessel and transplant it to the chest, preserving the underlying muscle. This is a drawing that depicts what I've been talking about and in this drawing, which you can find on my website.

And by the way, I'm not going to be showing any pre and post-op pictures in the interest of time, but I have plenty of them on my website if you're interested in seeing what this looks like in real life. What you're looking at here is a patient who's had a mastectomy on her right, and we're using the DIEP to reconstruct the breast.

We've taken the skin and the fat, as you can see in the picture, elevated it off of the anterior abdominal wall, found that blood vessel that's perforating through the rectus abdominis and then harvested, or as they say in Italy, liberated the skin and the fat and the blood vessel, which we call the DIEP flap, and then we transplant it to the chest by plugging those blood vessels in under a microscope to chest blood vessels.

Well, just to finalize that, there you have a living piece of tissue that the body recognizes as itself and accepts unequivocally, and you have a living natural piece of tissue that lives there forever. We can also take perforator flaps from anywhere on the body, anywhere where the patient has extra skin and fat to donate. This is an example of taking it from the buttock area.

When we take it from the upper buttock, we call it the SGAP or superior gluteal artery perforator flap. We take it from the lower buttock, we call it the IGAP or inferior gluteal artery perforator. The concept is exactly the same. Skin fat and blood vessel, muscle preservation, autologous breast reconstruction.

A couple more pictures of what the flap actually looks like when we take it out of the body, skin fat and blood vessels. And another very common operation that we do in patients who don't have enough abdominal tissue to make one or sometimes two breasts, particularly in the BRCA community, is the PAP flap, that stands for profunda artery perforator.

And again, it's just the name of the blood vessel that happens to be there supplying that tissue in the back of the leg. The profunda artery perforator. The

concept is exactly the same. So why doesn't everybody get a perforator flap? Well, I think the first reason is most women in this country get implant reconstruction because it's very, very commonly provided. There aren't that many places where you can actually get sophisticated perforator flap breast reconstruction.

It's also there are some drawbacks to perforator flaps. It's a longer surgery, it's a longer hospitalization. You absolutely have to have a scar at the donor site. That's not negotiable. Wherever we get the tissue from, there has to be some surgery there, obviously. And so again, and it requires specialization on the part of the surgeon and also on the part of the hospital that provides that operation.

But perforator flaps are the only operation that I do in my practice. I don't do cosmetic and I don't do implant reconstruction because in my opinion, they are the best option that is available. The reason for that may be intuitive. It's natural tissue, it's living tissue. It's a long-term solution. And once it heals and once the patient recovers, you really don't ever have to have any more surgery or ever have to have it replaced, and it's a permanent solution.

You can have sensation in these flaps. They look and feel and behave like a normal breast. So in my opinion, it is the best option and certainly it's not for everyone. And I concur with Dr. Salinas and Melissa that you absolutely need to know your options. The more knowledge that you gain in this area, the better equipped you'll be to make a good decision, to make a choice and to find the appropriate surgeon. Thank you.

Melissa Rosen: Thank you so much. And now we'll turn to Dr. Bunowitz. Dr. Levine, can you unshare? Great. Dr. B, do you want to share your slides or do you want me to?

Dr. Bunowitz: I do, but if you can share them for me, I'm afraid I'm going to wipe everything out if I try to do that again.

Melissa Rosen: Okay. So give me a second. You can introduce yourself or just give a quick preview as I find those slides in two seconds.

Dr. Bunowitz: I'm Dr. Brian Bunowitz. I'm a plastic surgeon practicing in the suburbs of Philadelphia. It is my honor to be able to speak with you tonight and definitely my honor to be able to talk in combination with Dr. Levine and Dr. Salinas. Their presentations were excellent. And a lot of what I'm going to say is repetitive in nature, but like's been said, when you start to hear the same things over and over again, you know you're getting good information. There you go. My slides-

Melissa Rosen: Are they up?

Dr. Bunowitz: I can see them.

Melissa Rosen: Yes. Okay, perfect. Amazing.

Dr. Bunowitz: That's because I'm not doing it. You can go to the next slide. Can I advance or you advance?

Melissa Rosen: I am advancing right now. On my screen it says you have no financial disclosures.

Dr. Bunowitz: I'm not saying that, but that's okay. I have no financial disclosures, no conflict of interest.

Melissa Rosen: It should say right now, aesthetic plaque closure, increase in post mastectomy breast.

Devorah Silverm...: No, it's still the first slide, Melissa.

Dr. Bunowitz: All right, at least it's not me again.

Melissa Rosen: I'm sorry. The same thing happened, Dr. Levine. I'm not sure what's going on.

Dr. Joshua Levi...: Of me?

Melissa Rosen: What happened that I couldn't advance your slides? Let me try one more time.

Dr. Bunowitz: I can try it from mine, but I hope I don't wipe myself out here.

Melissa Rosen: Are you seeing slides advance?

Dr. Bunowitz: Now we're getting, if you can go back.

Melissa Rosen: Okay, perfect. Perfect. Okay, so this is the first slide. Yep.

Dr. Bunowitz: Okay. So historically, back in 1998, we passed Women's Healthcare and Cancer Right Act that breast reconstruction was now deemed to be a covered procedure with insurance. So that opened up a huge opportunity for women to explore the possibility of breast reconstruction. At that point in time, average about 37.5% of people chose to have post-mastectomy breast reconstructions.

And for all the right reasons. There were significant psychosocial benefits, significant quality life benefits. The rates of reconstruction after this law was passed, increased significantly from 2004 to 2014. And then interestingly, sort of plateaued. And this was a survey performed by Dr. Johnson at the time. If you can go on to the next slide.

Interestingly, also, when you looked at this data, we saw that there were persistent disparities for post-mastectomy breast reconstruction based on race, ethnicity, age, and socioeconomic factors. You guys can hear me okay?

Melissa Rosen: Yes.

Dr. Bunowitz: Okay. Inequity, which was interesting with all this was there was a significant denial of access to aesthetic flat closure after mastectomy. And basically this is a group of women that for several different reasons, chose to not reconstruct at the time of mastectomy. So if we can go on the next slide. In 2016, there was a very interesting, and I consider landmark publication in the New York Times by Ronnie Rabin about her aesthetic flat closure and the barriers and difficulties that she encountered in order to try to find a surgeon willing to do this for her.

So that's part of the timing and all where choosing to not reconstruction became an option as reconstruction. So we can go to the next one. So what is aesthetic flat closure? Defined by the National Cancer Institute, aesthetic flat closure is a type of surgery to rebuild the shape of the chest wall after one or both breasts are removed.

Aesthetic flat closures can be done either immediately at the time of mastectomy, delayed if somebody has a reconstruction done in the meantime like an implant. But basically what you do with an aesthetic flat closure and compare to what Dr. Salinas and Dr. Levine has also discussed, it's a much simpler, less complicated operation to perform.

You're removing obviously extra skin from the mastectomy, you are tapering and evening out the skin flaps removing extra fat. So there's a nice even flat closure to the chest wall. You're trying, you have to obliterate the inframammary crease of the breast so you're not seeing that natural anatomic boundary on the chest wall and then tightening the tissue so that people have a cosmetically acceptable flat closure to the chest. Next slide.

So a flat closure of the chest, flat with a T, I consider it a third option in breast reconstruction. And there are many reasons why this is necessary. The most important thing out of all this is if you've had your doors blown off that you've been told you've breast cancer and that you have a cancer now and that you're going to need an operation and lose your breast in order to treat that cancer, it's important to know that you have the options for reconstruction.

It's also important to know that that's not a decision that you necessarily have to make it immediately at that point in time. It can be a delayed reconstruction. There are operations you can do to temporize that in the meantime. The aesthetic flat closure for breast reconstruction, it's now a recognized procedure. There are societies that are now giving instructional courses with their oncoplastic surgeons how to perform this. We can go on the next slide.

So it was interesting, Dr. Baker did an online survey of 931 women who had a history of either one or both sides of mastectomy to treat breast cancer, high risk breast disease. Again, mastectomy alone was the first choice in the majority of these patients, which is interesting. Two top reasons when they went back with the survey as to why women chose this was a faster recovery, avoidance of a foreign body in their body, the mean satisfaction scale when they went back

and looked at the patients that chose to have no reconstruction at all was 3.72 out of a five.

The patients that scored much lower were basically for the decision was based because their surgeon really didn't support them on the concept of a flat closure. The satisfaction also was when patients had a BMI greater than 30 kilograms per meter squared, and most of those patients were unsatisfied because there was a denial of flat closure by their surgeons. So we can go to the next slide.

Despite patient demand for this, there really isn't a lot of literature out there on flat closure. There aren't a lot of presentations that you see. It's a fairly straightforward operation as a plastic surgeon to perform though. Next slide. So the goals of aesthetic flat closure for a patient, and whether you're choosing to do no reconstruction at all, not even a flat closure, just leave the tissue that's there, make a decision later on that you've made a decision that I'm not having a reconstruction at all.

I want my chest to look as cosmetically acceptable as possible. Or if you're choosing a reconstruction option, you have to do your homework. You've got to use your support groups that you have. Your treating physicians, other support groups like this, internet, social media platforms to help you make the informed decision. You want to make sure absolutely that whatever decision you make, you are not impacting your treatment of your breast cancer, that you make a decision that you're going to delay further treatment such as chemotherapy or radiation therapy. You may also be open for an investigational protocol for your breast cancer.

Most importantly too, you need to be able to express your goals to your treating team. That if you're unsure about a reconstruction or what you want or thinking about a breast flat closure, that you express that to your team, that they're supportive of you. And from a surgeon's standpoint, they need to inform you of the potential risks and benefits and future implications of your decisions.

I mean, if you choose an aesthetic flat closure and you're obliterating an inframammary crease, removing tissue, making an incision across your sternal midline where you can have some scarring issues, that could potentially impact what you want to do in the future if you change your mind. Next slide.

So for us as physicians, pretty much what we went through and the same thing with reconstruction, we need to listen to our patients. What are the reconstructive goals? What do they want to look like when they're finished? What again, from a patient, what do they consider a successful reconstruction? What we as surgeons think as an aesthetically positive outcome, a good result from a reconstruction, a patient can look at that and be incredibly unhappy.

Again, like we went through to plan to address how you address the extra skin of a patient, the excess tissue, equalizing of the thickness, the skin flaps, the things are cosmetically acceptable like we do in the operating room too. When you're doing this type of operation, you've got to sit people up and lay them back down to make sure things that are looking natural and matching.

Most importantly also is planting your scars from our standpoint that they're symmetrical. You don't want to see scars that are not matching because just inherently, it doesn't look like things are symmetrical. And again, you need to discuss the potential risks and benefits of the choices that you're making. There are downsides to everything you may choose. So reconstruction or no reconstruction or a flat reconstruction, each patient is unique and deserves a separate unique game plan. Next slide.

There we go. So again, looking at the web and all, there are a ton of resources out there. If you Google aesthetic flat breast reconstruction within the first couple pages, you'll see a ton of websites pop up that give you a good deal of information. There are thousands of pictures out there. From my standpoint, I am basically an outpatient surgeon. I don't operate in the hospital anymore.

A lot of the patients I see and I treat right now are complications from breast implants, either breast reconstruction or aesthetic breast implants. So it's a unique subset of patients that they've had an operation and their tissues have already been altered by what they've chosen to do. So it definitely can affect the cosmetic result you get from going to an aesthetic flat closure after reconstruction and taking implants out or tissue out. So you just need to be very careful about the choices that you make. And that's it.

Melissa Rosen: And that's it. Okay. Thank you so much to all three of you. I'm going to bring you all back here because what I'll say is we had so much information tonight and the doctors have very generously agreed to stay on for an extra few minutes to answer some questions. Did we lose Dr. Bunowitz because all of a sudden I don't see.

Devorah Silverm...: No, he's there.

Melissa Rosen: Oh, there you are. Okay.

Dr. Bunowitz: I see you. I'm in the background.

Devorah Silverm...: I'll spotlight him.

Dr. Bunowitz: There we go. Oh, thank you. Perfect. Okay. I have to say we received so many questions, so many really good questions, so we're not going to get to them all, but we're going to give it a shot here. So one that just came in through the chat is what happens if cancer recurs in a reconstructed breast, either type of

reconstructed breast? I guess that's a little bit for Dr. Salinas and a little bit for Dr. Levine.

Dr. Harry Salin...: The recurrences usually happen, the local regional recurrences happen either in the axilla or in the breast. They tend to involve the skin. There's a lot of nuances. When you have an implant-based reconstruction and the reconstruction is behind the muscle, if you recur at the chest wall/muscle or at the skin, you usually feel it. And in an autologous reconstruction. Dr. Levine can answer that question, but again, they tend to be at the skin and they tend to be palpable or immediately underneath the skin. But I'll let him address that.

Dr. Joshua Levi...: Well, it's important to know that any woman who's had a mastectomy for either breast cancer or genetic mutation needs to continue to follow up with their mastectomy surgeon and oncologist yearly to monitor for recurrence. Monitoring usually involves physical exam and not mammography. There's no breast tissue per se. The mastectomy should have removed all of the breast tissue.

That's not always the case, but it should be the case. And so monitoring typically involves physical exam. If there's any suspicion, then other modalities can be used like a CT scan or MRI or ultrasound. But when you have a recurrence, you have to also understand that it doesn't happen within the reconstruction.

It happens within the skin or the chest wall. And so usually it can be removed without any consequence to the reconstruction. If it's very advanced and it does grow into the reconstruction, obviously you can run into some problems. That's extremely rare.

Melissa Rosen: Okay, thank you. That's helpful.

Dr. Harry Salin...: The only imaging that needs to happen after you've had a mastectomy and reconstruction is if you've had a reconstruction with implants. The FDA wants you to monitor the implants for integrity. Five or six years out after you get those implants placed, we recommend that you do either a high resolution ultrasound or an MRI every other year just to make sure the implant is intact because the implants have a rupture rate that's about 0.5 or 1% per year. So that's the only imaging that needs to happen afterward. It's all otherwise done by physical exam.

Melissa Rosen: Thank you. Okay. So can you speak about options for natural tissue reconstruction after an implant? If you have an implant removed, can you still do an autologous reconstruction? And is there an optimal timeframe to do this in? And can the nerves also be reattached?

Dr. Joshua Levi...: So autologous reconstruction after implant reconstruction is very, very common. And that's because a lot of implants don't work out for a variety of different reasons. It runs the spectrum of overt frank failure, which may be

associated with scar tissue and infection and things like that, all the way to the other end of the spectrum, which is I just don't like the way they feel and everything in between.

So I take out a lot of implants. It's actually the majority of my practice, more than 50% is implant replacement with patient's own body tissue. So the answer to the question is, yes, it can be done. It's very common, and the timing is really dependent upon the patient.

There's no requirement in that regard unless, of course, there are some extenuating circumstance relative to the implant where you have an open wound or an active infection that obviously has to be dealt with before you have an autologous reconstruction.

Melissa Rosen: Thank you. Dr. B, this one's for you, are there, or maybe it's for more than one of you, are there any implants now, and I think maybe Dr. Salinas already alluded to this, that don't place patients at a higher risk for additional cancer? So the smooth ones, there are no, just to confirm, nobody is putting textured gummy implants into women at this point. Is that accurate?

Dr. Harry Salin...: No, that's not true. That's not accurate. I don't put any textured implants. So there's different texturing technologies for implants and we don't need to get into it, but just some of them are higher risk for lymphoma, some of them are lower risk for lymphoma. There's only one type of texturing technology that's been removed off the market.

There are still textured implants in the American market. They're not used very commonly in the United States, but there are plenty of surgeons that still use them as opposed to South America or Europe, which is still a predominantly textured implant market.

It's really hard to figure out the denominator when you're looking at what is the incidence of lymphoma in a textured implant because figuring out how many implants have been placed worldwide is really hard. We know how many cases of lymphoma there have been worldwide, but we don't know how many implants have been placed.

So the denominator is hard to figure out. There's reports anywhere from one in 80000 to one in 2000. So most of us use smooth devices. Every case of lymphoma in the literature has been associated with the presence of a textured device at some point in the patient's lifetime. So there are patients with a smooth implant that develop lymphoma, but all of those have had a textured device in the past, could have been a textured expander, could have been a textured implant.

Melissa Rosen: Interesting. And for those who currently have the textured implants in them, the advice you give patients, and I'm sure all of you have some thoughts on this.

Dr. Harry Salin...: Yeah, I see a lot of those. It's a very long conversation. The party line, meaning what the FDA recommendation is that we don't remove them prophylactically, meaning we don't remove them just because they're textured. But that's a hard conversation to have with a patient, particularly that had mastectomies in the setting of cancer. And then they have a device in them that can predispose them to a different cancer. Most of them want them out. So I do a lot of texture to smooth implant replacements.

Melissa Rosen: All right. Dr. B, can you please address BII, breast implant illness in relation to reconstruction decisions and going flat decisions? We haven't really alluded to breast implant illness tonight.

Dr. Bunowitz: There are people that have complications of breast implants and they can be the known complications like capsular contractures, malposition of implants, just not being comfortable with the feel of a foreign body inside of them. There are definitely systemic symptoms that people get from breast implants, which is basically breast implant illness syndrome.

But when you look at the bottom line, there are patients that have been, they are a manmade device, they don't last for, there are known complications. There's going to be a known failure rate and it's going to come a point in time and a certain number of patients. And again, because we don't know how many implants we put in patients, how common this is that they're just basically not working.

So at that point in time you need to make a decision to take your implants out, and from my standpoint, I like to cut all the chronic inflammatory scar tissue, the capsule out around that implant. It makes sense. But again, you have patients that present with symptoms from breast implants, breast implant illness syndrome or capsular contracture, whatever, but they want their implants out, but they still have a native breast that's there with time and progression.

They have still a significant amount of breast tissue that can just remove the implant alone or do a mastopexy and get a very favorable result. To the patient on the other end of the extreme that's had a reconstruction done that's had radiation, that they have paper thin skin flaps on top of the implants, and no matter what you do, their cosmetic outcome is not going to be acceptable.

That type of patient though still, I mean if somebody's had symptoms from their implants and you remove their implants and they're better, what that cosmetic outcome is, it's very patient dependent.

Melissa Rosen: Got it, got it. Well, you actually alluded to or mentioned here, radiation. So, many of the questions that came in had to do with options post radiation. Some of them were, I'm having radiation now, I've delayed my reconstruction. What options do I have?

Some are, I had radiation 30 years ago, but I need to make a change or I've been diagnosed again. So can all of you from your perspective very briefly, and I'm sorry to have to add that in, talk about how radiation therapy impacts the work that each of you does?

Dr. Harry Salin...: There's two questions here. The question is, did you have radiation and didn't have reconstruction? And then the second question is, did you have your construction and then you had radiation because they're separate issues. Essentially, radiation will damage the skin of the breast permanently, forever. It's always different.

It doesn't matter if it was 30 years ago or if it was one year ago. There are some changes that improve over time, but it's never the same. Radiation and implants are not a good mix. Patients that are radiated that have implants don't do well. About 30 to 50% of them have a severe capsular contracture. Now I'm talking about the patient that got reconstructed with implants then got radiated. And now the only way to solve that is to add non-radiated tissue.

And that can be done to Dr. Levine right, where you remove the implant and do a full autologous reconstruction. Or it can be done by putting a latissimus flap and conserving the implant and the latissimus flap adds non-radiated muscle and it adds a skin island of live non-radiated skin and it loosens up the space.

And both of those are options. And if you have been radiated in the past and didn't get reconstruction, you have to add non-radiated tissue. Again, same way, either a latissimus with an expander or a full autologous reconstruction that Dr. Levine described, but radiation and implants alone tends to be a problem.

Melissa Rosen: Okay. Anyone else have something to add from the autologous or flat perspective?

Dr. Joshua Levi...: I would agree with everything just said, and I think that there is a consensus that radiation and implants is a bad combination. That's not true for autologous reconstruction, but there is an issue that comes up and that's the question of timing with respect to radiation and reconstruction.

In other words, if a patient is having a mastectomy and they know which is not always the case, you don't always know, but if you do know or you suspect that there's a good chance that you might require radiation or the radiation may be recommended, then there's a really interesting and valid question as to whether not you should proceed with any type of reconstruction and if so, what type of reconstruction and whether or not you should proceed with autologous, even if you know want that in the end.

And it's a controversial topic and we can talk about it forever. My opinion is that you should proceed with it, with autologous reconstruction even in the face of

known radiation coming in your future. But this is a very broad topic of conversation.

Dr. Bunowitz: Again, radiated tissue just behaves very unpredictably.

Melissa Rosen: Okay. We have time for just a few more questions. One that just came in had to do with lumpectomy. Are there any options for women whose breasts have been changed by lumpectomy, maybe more than one lumpectomy, so that there's a significant difference from the way they were pre-surgery, but it's not a mastectomy? Are there any options there?

Dr. Joshua Levi...: Yes.

Dr. Harry Salin...: Yeah, there's lots of options for lumpectomies. The best option is to do an oncoplastic reconstruction upfront. That I think gives you the best long-term outcome. But if you have a lumpectomy defect and it's delayed, meaning you had the lumpectomy, didn't have anything done immediately, and now you have a lumpectomy that's radiated, there's a variety of flaps that can be performed to fill that defect where you bring vascularization, that's usually the best option.

And I'm sure Dr. Levine does a bunch of those, or you can fat graph the lumpectomy defect. It doesn't work that great, but it makes things a little bit better.

Dr. Joshua Levi...: So there are options. That's amazing.

Dr. Harry Salin...: Best way to treat them is to prevent them.

Melissa Rosen: Right, right, right. Okay. Two more questions. One had to do with nerve, actually three because one just came in, one has to do with nerve sensation. Do you do that routinely or ever, Dr. Levine as you're doing autologous or is that a completely different procedure that happens afterward?

Dr. Joshua Levi...: A couple of things. The most important component of sensation post mastectomy has to do with the quality of the mastectomy itself. It doesn't have as much to do with the reconstruction because if there's a very high quality mastectomy being done, that means that all of the breast tissue is removed, but all of the surrounding tissue that's not breast is preserved.

And if the mastectomy is done expertly with a lot of care to preserve the architecture of the remaining skin, then the nerves that supply that skin can also be preserved. And that's important. The other thing is that if you have an implant reconstruction, nerves will not grow into the implant. So the implant will never become sensei. But if you have an autologous reconstruction, there's a high likelihood that nerves will grow into it and you will have some degree of sensation.

Many autologous patients do report return of sensation. It's almost never normal, and it's almost never erotic, but it does come back. Now, there are a lot of micro-surgeons who are hooking up nerves, and there is some data to suggest that if you do nerve coaptation that you will have an increased likelihood of developing sensation.

It's very minimally beneficial, even in the best of circumstances, but it is something to talk to the surgeon about. It is something to consider. There are advantages and disadvantages to it. And again, it's a very rich and broad topic of discussion.

Dr. Harry Salin...: And then along that topic, you will find out there are procedures to try to re-innervate nipples, even an implant reconstruction where we put a nerve graph from the, we find the fourth intercostal nerve at the time of mastectomy, you put a nerve graph to the back of the nipple. It's a very new thing.

There's very little data. Some of it looks promising. I haven't personally noticed a whole lot of stuff. I've done it a lot, at least in my experience, it doesn't work very well, but it is something that's out there and it's worth looking into and talking to your surgeons about it.

Melissa Rosen: Okay. Final question. So somebody asked, they're in the process of planning their procedure and they are talking to their plastic surgeon, they want flat closure, aesthetic flat closure, and have asked for a plastic surgeon to come in and join the breast surgeon in the operating room.

They've been told that is unnecessary, that if they're not reconstructing, they don't need a plastic surgeon. The question is what's the standard of care here and how do I advocate for myself? So Dr. B, I think this one's you.

Dr. Bunowitz: I mean, we're still a free country. If somebody wants a plastic surgeon to come in and to perform a closure, I agree. And as a plastic surgeon, we have the knowledge and the techniques that you can try to get as best a cosmetic outcome as possible. Part of the issue with this, there is no CPT code.

There's no way that under insurance, somebody can put a five digit code in it that this is an aesthetic flat closure or try to get pre-certification for it. So it's always a challenge trying to get insurance to cover this, but if that's somebody's desire, yes, they should be able to get a choice and get a plastic surgeon to come in.

Melissa Rosen: Because there is definitely a difference, just to clarify, between an aesthetic flat closure and no reconstruction.

Dr. Bunowitz: Oh, absolutely. If you're just closing a mastectomy defect, completely different.

Melissa Rosen: Right. Okay. I just wanted to make sure we said that out loud. Okay. So I wish that we had time for so many more questions, and if there was a question that you didn't get answered, you can email us and we will try and get that answer for you. But everybody's been very generous with their time, and so I want to look to close this out.

So first of all, I want to thank Dr.'s Bunowitz, Levine and Salinas for sharing their expertise and their passions with us tonight. I hope you found this as informative as I did, and based on the comments in the chat box, it seems like you did. Thank you again to Miami Cancer Institute, Daiichi Sankyo, Merck, and the Cooperative Agreement 191906 from the Centers for Disease Control and Prevention.

As we conclude this evening, the evaluation link is now in the chat box and you can actually click that and still listen to the rest of the webinar, the last few minutes of it. So I encourage you to do that. While you do that, I want to remind you that Sharsheret has many programs to help you deal with the issues surrounding mastectomy and reconstructive decisions.

Tonight's presentations and questions focused on the medical aspects of these surgeries but sometimes you just simply need to talk with someone who's been there. Our peer support program can connect you with someone who's had a mastectomy, had implant-based or autologous reconstruction, or has chosen to go flat. These connections are not medical advice, but a chance to hear someone else's experience and even ask questions about that experience.

Additionally, our Best Face Forward or BFF 2.0 program provides need-based financial subsidies for several non-medical expenses. One of those is micropigmentation, otherwise known as 3D nipple and areola tattooing. There's an opportunity to request more information about peer support and the financial subsidy program in our evaluation that you can fill out.

And I just put that back in the chat box, that link. I also want to be sure as the last thing I'm going to say is that I want you to be aware of two upcoming webinars that I think this group might be particularly interested in. So this coming Monday the 20th, we will present a webinar about style and elegance during and after cancer.

The webinar is three very brief, amazing presentations from amazing professionals that can help you navigate style during and after your cancer. There's going to be a mastectomy bra fitter. There's going to be someone who created a head covering company and there's going to be a celebrity stylist there.

But the majority of that webinar will be answering your questions when you register, you can note any questions you may have, and there'll be the chat box opportunity as well. 20 minutes ago, an email hit your inbox about that webinar,

giving you an opportunity to register. So you can head right to your inbox if you want to register for that.

And then the second one is navigating hair loss and other body image changes during cancer care, essential tips for cancer survivors. And that one is Wednesday, May 29th. We're going to focus on hair loss and scars, but there are a lot of other things we're going to be talking about as well. So you'll get information about that in your inbox shortly too in the next couple of days.

And of course, remember that your Sharsheret social workers are there for you to answer questions, connect you with resources, and provide support. I'm going to ask one of my colleagues to put that email in the chat box right now, clinicalstaff@Sharesheret.org. And again, one final thank you to all of our doctors for sharing. And thank you for coming on tonight and being with us. Have a wonderful evening and good night.