Angelica Ladd:

Well, good evening, and welcome to Look the Way You Feel: The Facts, the Myths, and the Misconceptions of Plastic Surgery, which is part of the Dartmouth-Hitchcock Health Healthy Living Series. I'm Angelica Ladd, community relations specialist here at Dartmouth-Hitchcock Health, and this evening you will hear from Dr. Michael Tantillo, plastic surgeon at Dartmouth-Hitchcock Manchester.

But first, we just want to cover a few housekeeping items. Thank you to everyone who submitted questions ahead of time. Dr. Tantillo will address those during this evening's program. If you have any questions throughout, please submit them using the Q&A function and we'll work those into the program or answer them at the end. Tonight's presentation is being recorded and will be available on the Dartmouth-Hitchcock YouTube page later this week. Closed captions are also now available. Following the presentation, you will receive a link for a quick survey. We ask that you take ... it's just about three minutes or less, and by completing that survey, it will help us with future Healthy Living Series programs. Also, if you have any questions lingering while you're taking that survey, you can ask them through the survey. Just please remember to include your contact information so that we can follow up with you.

Okay, so that's it. That's real quick and easy. Now I am going to toss it to Dr. Michael Tantillo, and the stage is yours.

Dr. Michael Tantillo:

Thanks, Angelica, and thanks to all you guys for taking some time out of your beautiful summer evening to spend with us. Hopefully this will be enjoyable and informative. Again, anytime questions come up, I'm happy to be interrupted, make the talk as interactive as a Zoom talk can be. Tonight we'll talk about plastic surgery and the role of plastic surgery for our patients.

I get asked a lot, why is the field called plastic surgery? Well, it comes from the Greek words [Greek 00:02:29], which means reshaping. That's kind of the core of our specialty. The term "plastic" was first applied to surgery in 1839. In 1909, it was first applied to the material, so we were 70 years ahead of the material. This picture is a picture taken in 1954 of Dr. Joseph Murray, who was a plastic surgeon at the Brigham, performing the world's first kidney transplant.

Just to say a word or two about board certification. It really is a buyer beware world out there, because people can create a "board" and market themselves as expert or expertly trained in plastic or aesthetic surgery. There are really four core aesthetic boards or specialties, that of plastic surgery, ENT, dermatology, and ophthalmology. The American Board of Otolaryngology does have a sub board of facial and plastic reconstructive surgery, but beyond that, a physician can claim to be a plastic surgeon without any real board certification or training. We legally don't have claim to the term "plastic surgery" or "plastic surgeon." So you just want to check out the credentials of your plastic surgeon before diving in too deep.

Tonight we'll talk about reconstruction and aesthetics in medicine and surgery. Let's see, my animation is not working. Oh, here we go. One of the things that is, I think, very cool about plastic surgery and attracts a lot of us to plastic surgery is all of the people depicted in this slide could very well be plastic surgery patients or patients of a plastic surgeon. That is, I would say, a unique thing about our specialty. We really aren't confined to an age or a demographic or an organ system or a body part. We really operate head to toe, on patients from infancy all the way up to the elderly.

So where we start to talk about plastic surgery ... Plastic surgery overlaps with skincare and dermatologists and estheticians to varying degrees. But a lot of what we do is with the skin, and so I'd be remiss if I didn't mention that skincare is an important part of overall health. That really is protecting

from the sun, vigilant use of sunscreen and avoidance of tobacco and eating a healthy deity. And again, some plastic surgeon's offices have these services within their office and others don't.

Aesthetic medicine, as distinct from surgery, we tend to think of it as really noninvasive skin rejuvenations, aesthetic services that are done in the office or in a medical spa or a setting such as that. They can be topical retinoids or other acids, which help tighten and rejuvenate the skin. Probably the most common for or best known forms of aesthetic medicine are neurotoxins and fillers. Botox is the common name that people hear and associate with neurotoxins. That's Allergan's brand name of their botulinum toxin. There are, of course, other brands out there.

But neurotoxins and fillers are a really powerful part of aesthetics. They're very commonly used. This is a picture of one of my partners, Jennifer Kinese, injecting a patient, and these are her cases. And these are examples of what neurotoxin can accomplish. Neurotoxin weakens muscles of animation, and then subsequent to that weakening, the lines that are caused by that animation soften or disappear. Neurotoxins are temporary and people get them every four to six months. These are some examples of dermal filler. The slide on the left is of the patient's nasolabial folds, obviously, being treated. A common sign of aging is volume loss and soft tissue descent really highlighting the nasolabial folds. Then on the right is a patient who's had their cheek volumized with filler. Fillers last a little bit longer than neurotoxins, anywhere from one to two years, but they are also temporary. Lips are a super common area of treatment. Here's just a couple of examples of patients who've had their lips treated with fillers. The most common fillers that are used is hyaluronic acid fillers, and these are two examples of various types of hyaluronic acid being used to fill the lips.

Aesthetic medicine also involves noninvasive body contouring. The most common is fat reduction. There's two primary ways that we reduce or remove fat in a noninvasive way. One is basically to cool it and one is to heat it. CoolSculpting takes advantage of the fact that fat cells are killed at about 14 degrees Centigrade and the surrounding tissues are not damaged until lower temperatures, so CoolSculpting gets the tissue in the treatment area into that just sub-14 degrees Centigrade and then the fat cells, they lyse, and the body just gets rid of them. Once we reach adolescence, we don't grow new fat cells, so any fat cells that are removed by any method ... invasive, noninvasive, heating, or cooling ... they are permanently removed. Then the second, really more common way, is radiofrequency-induced fat reduction. That's really heating the fat cells, and TruSculpt is a brand name of that modality.

There are some synergies between the two treatments, and so they can be marketed as fire and ice for obvious reasons. But many times, patient will have a CoolSculpt treatment followed by a TruSculpt treatment or even multiple treatments, because they do have a little bit different applications, a little bit different limitations. These are two examples of patients who have been treated with CoolSculpt in the abdomen. That's, again, a noninvasive med spa office type of treatment. Takes one to four hours, depending on how many sites are being treated. Each treatment site takes about 35 minutes, but patients can have four, six, eight treatment sites in one setting. And then TruSculpt, similarly, these treatments are a little bit faster. They're 15 to 30 minutes, and again, multiple areas can be treated. So there's definitely very good, very real results with noninvasive treatments.

The market is really reflecting patients' real desire and preference, for obvious reasons, to have a noninvasive treatment. I mean, treatments that are effective and noninvasive, don't require surgery, don't require downtime are more and more popular and certainly will continue to be more and more popular. As the treatments get better, there gets to be more treatments, the technology improves, which just allows us to do more and more without surgery.

But surgery does have a role, thankfully, for the surgeons, I guess. But there are still ... Aesthetic medicine and surgery will be certainly complementary to one another. And really, the more invasive the

procedures, the more control that the surgeon has over the result. We really are trading scar and I suppose downtime for contouring. But even in the operating room these days, we are incorporating technology. There are some radiofrequency skin tightening devices, for example, that can be combined with liposuction or other facial aesthetic surgery, for example.

People ask, what's the difference between aesthetic and reconstructive surgery? There's no firm and fast definition of it. Most of the time, we take the practical distinction and just delineate who's paying for it. If it's an out-of-pocket patient pay procedure, we tend to call it aesthetic surgery, and if it's a procedure that is reimbursed by one's healthcare insurance, then we tend to call it reconstructive. There's a ton of overlap, and in fact, the same procedures can be an aesthetic procedure in one patient and a reconstructive patient in the other, meaning that sometimes the insurance companies will pay for a particular procedure in a particular circumstance for a particular patient, and other times they won't. So there's definitely overlap, and most surgeons do involve both aesthetic and reconstructive surgery. Now, these are examples of patients who are "reconstructive surgery patients." The patient on the left side of the screen has a skin cancer of the nose, and the patient on the right side of the screen had breast cancer and bilateral mastectomies and breast reconstruction.

I say good reconstructive surgery becomes aesthetic surgery, that we get to the point where we're not only just fixing the problem or closing the wound or whatnot, but we're doing it in such a way that patients feel good about themselves, feel happy they're not constantly reminded of the fact they had a wound or a cancer or whatnot.

I thought we'd just first talk anatomically about some examples of plastic surgery in patients. And really, this talk is going to be patients ... women in the 20 to 60-year-old demographic, roughly. And so common operation is a facelift, and this is sort of ... Particularly when I started in practice, this was your typical aged patient one would see for a facelift, in her 60s, some sagging skin, sagging neck. That was treated with a standard facelift, still a terrific and commonly performed operation.

But as time and techniques have gone on ... Now, this patient more recently, 40s, this is a facelift patient. She had a facelift along with fat transfer to add volume to her midface, and this is the kind of patient that, 20 years ago, we would have said, "You're not ready for a facelift." But to me, this has gone from a patient that looks kind of sad to a patient that looks happy and vibrant and engaged, and that's a combination of a facelift procedure and a fat transfer procedure, a procedure that takes fat from one part of the body and moves it to another. We do this all over the body ... the face, hands, breast, buttock. Fat transfer is a more and more commonly performed procedure.

The eyes are a sign of expression, a sign of people being tired, people being engaged, and so eyelid surgery is a very commonly done procedure. The top patient is in her late 40s. The bottom patient was actually in her late 20s and just had these fat bags that just were there, I mean, just kind of genetically there, and obviously, she didn't like them. She just got tired of people telling her, "Oh, you look so tired. What's wrong? Get some sleep," yada yada. And so these are surgical remedies.

Rhinoplasty ... common procedure, young women in particular. This patient's in her early 20s. Common age group for rhinoplasty. And then this is that patient that I showed when I was talking about the difference between aesthetic and reconstructive and the blend. This is a skin cancer, a melanoma of her nose. This is what the Mohs surgeon removed. I'll spare you the picture with all that skin removed. This is her reconstruction where we take tissue from her forehead and bring it down and reconstruct the nasal tip. She has to live like that for three weeks. And then at the end of the reconstruction, a result that gets her back to not focusing on her nose and not being self conscious of that.

Body surgery, breast and body surgery, another common area that we see patients for. Breast implants get a lot of press. Honestly, like many things, the negative press is louder than the positive

press. But these are examples of two patients. One is a breast cancer patient, one is a patient who's had a cosmetic breast augmentation. We use breast implants for both types of patients. Breast implants have been around since the early 60s. Dr. Cronin in Texas first came up with the idea of breast implants. Although, what time was this? I forget the year. In the early 1700s, a surgeon moved a lipoma to fill a breast tumor defect. It didn't work out too well, but it was a good try. So the things that make up breast implants ... We have the shell of the implant. That's the outer part of it. We have the shape of the implant, is it round? These are three round implants shown. Or is it teardrop? And the fill material, which is either a saline, which is saltwater, or silicone gel.

For breast reconstruction, oftentimes we will use a tissue expander to expand the skin envelope after the mastectomy, and then three to six months later, take the expander out and replace it with a permanent implant. The expanders are filled in the office with saline ... excuse me. The expanders are filled in the office with saline, and then most of the time these days, we use silicone gel-filled implants, both for breast reconstruction and aesthetic cases. Implants, like all medical devices, do have their complications, and these complications can certainly require revisional surgery. While the complication rate is low, we would never consider them to be lifetime devices, so most patients who have breast implants will have them replaced at some point.

That notwithstanding, this is a study from Sientra, one of the three implant manufacturers that provide us implants in the United States, with very, very high satisfaction rates. This is a breast augmentation cohort study. It's hard to get 90% satisfaction for ... I think Geico and breast implants. Maybe those are the two that have 90% patient satisfaction or customer satisfaction.

So again, breast implants can be used in aesthetic cases. This is a very common situation. Young woman, between college and professional world. She wants to feel better in clothes, swimwear, et cetera, and this is a aesthetic augmentation. This is a patient that, again, we blur the lines between aesthetic and reconstructive. This is a congenital deformity. It's called tuberous breast deformity. You notice that her breasts are really underdeveloped, particularly the lower pole of the breast, the lower part of the breast, and so this is treated with a breast implant reconstruction. Then another patient, early 20s. This was not considered, actually, a reconstruction, at least by her insurance company, even though there's significant assymetry, significant breast ptosis. This is a patient who obviously had a breast lift along with breast implants placed.

Breast lift and breast reduction, another spectrum of aesthetic versus reconstructive surgery. They're the same technical operation. It just depends on if the insurance company pays for it, and that is usually dictated by how much tissue is being removed. I mean, we'd like to think that the insurance companies really are interested in patients' symptoms, but the reality is, each company has its own algorithm for criteria of approving or denying a breast reduction and it's really based on the weight, the volume of tissue that is removed. So this, honestly ... I believe this was a patient pay procedure, breast lift with a breast tissue reduction. This is another patient, larger breasts. This was a insurance pay procedure. Again, breast lift and breast reduction are the same technical procedure, so patients who have a "breast reduction" also have a breast lift.

Body contouring surgery, certainly very common, this series of procedures. This is a patient who had liposuction in the operating room. Again, the noninvasive cases were significant improvement, but it is true with liposuction, we're not limited by the applicators and the placement of where the technology can get to and that, so it can be a little more global procedure that even in patients who are not overweight is a really good operation. In fact, liposuction is really a contouring operation and the best patients are really patients who are not overweight. It's not a weight loss procedure.

Abdominoplasty ... the common situation here, a patient has postpartum, got some laxity of the abdomen. Obviously, she's fit, she's not overweight. But that loose skin, particularly of the lower

abdomen, is just not going to go anywhere without surgery. We don't have, right now at least, any noninvasive techniques that will tighten the tissues this much, as much as an abdominoplasty would do. [inaudible 00:25:26] patient who've lost some weight, got a little more global, if you will, a little more circumferential excess tissue. Abdominoplasty with some liposuction can certainly help contour the torso in this situation. And then there are patients who put it all together. I mean, a lot of these times, it's called the "mommy makeover." That's really just a marketing thing that is just kind of a catchall phrase for patients who have postpartum breast and body contouring. It can be any combination of implants, lift, reduction, liposuction, tummy tuck, torsoplasty. So this patient obviously had breast augmentation with a tummy tuck and some liposuction, so that's kind of putting most of the body contouring work we have, putting that all together.

Again, postpartum patients, a very common demographic that we see, and it's mostly breast and body. Patient, some ptosis ... some ptosis meaning breast droop ... some deflation after nursing, interested in a breast lift, restoring some volume that she had before. So this is a lift with breast implants. Another more extreme postpartum abdomen. I mean, this patient had five children, five pregnancies, five single births, and a lot of lax, stretched out skin in the lower abdomen. Again, she's obviously fit. She doesn't need to lose weight. Weight loss isn't going to do anything here, and noninvasive skin tightening is not going to do anything, so this patient's really treated with surgery.

Post weight loss patients, another common area that we see. We tend to think first of body, but patients lose a lot in the face. It's not uncommon, actually, for patients who have lost a significant amount of weight, 100-plus pounds, to say, "Geez, I like my driver's license picture better when I was heavier." And so restorative facial surgery ... that includes facelift, fat transfer, putting some fat back in the midface can help. But this is what more tend to think of ... excess skin, breast droop with weight loss, and so this is a patient who again had a breast lift, breast implants, abdominal work with the tummy tuck.

Oh, I think one of the questions was people were asking ... I think somebody asked about post weight loss, who pays? We deal with this all the time. The insurance companies, they vary, and unfortunately, that's a case-by-case basis. I really wish they would at least have some objective criteria that we all knew about ahead of time, but to date, they don't. When a patient comes in who's had massive weight loss, bariatric surgery or not, and is having symptoms of excess skin and intertrigo and things like that, difficulty exercising, we do make an effort to try to get those approved. But it's unfortunately just very unpredictable, and more times than not can be disappointing for the patient. Although I will say, sometimes we're surprised the other way and things that we don't think will get approved, end up getting approved. But no good answer there.

So breast cancer, obviously another area that we as plastic surgeons interface with women, female patients in this age group. There are several different types of breast cancer. Breast reconstruction, sorry. This patient had a right mastectomy, and this is showing her abdominal flap reconstruction before the nipple-areola reconstruction, just to kind of show you how that works. The skin here is from the abdomen, and then all this tissue, this volume, is from her abdomen. That's called a TRAM flap. This is a patient who had TRAM flaps on both sides, bilateral TRAM flaps. This is a patient who had an implant-based reconstruction, so obviously, she had an augmentation on the right side and then a mastectomy on the left with an implant-based reconstruction. Another patient who had bilateral mastectomies with reconstruction, and so she had back flaps, took muscle and skin from her back, with breast implants. So this skin of the back subsequently becomes ... the nipple reconstruction is done there, and then that's subsequently tattooed.

So why do we go into plastic surgery? I mean, everybody has their own answer. I mean, for me, giving people their confidence back to really get out there and get on with their life or just feel better

about themselves, I'd say that's an underlying theme for me. Other plastic surgeons, I'm sure, have their own take on it or own nuance on it. So that's about all I had to say. I'm happy to entertain questions or comments or whatever.

Angelica Ladd:

Thanks, Dr. Tantillo. We do have some time for questions. I know that we had some ahead of the program today, so why don't I grab those. I just had it up [inaudible 00:32:25]. There we go. We had a question about surgery after a significant weight loss. What are the risks and what is the recovery time for skin removal after a significant weight loss?

Dr. Michael Tantillo:

It depends on what procedures are being done, but the biggest recovery comes from the torso work, abdominoplasty or torsoplasty, which is simply a skin excision that doesn't stop at the front of the abdomen, it goes all the way around. That's a good three-week recovery from work, six weeks from strenuous core activity. Usually done as an outpatient. Occasionally patients will spend the night, but that's pretty unusual these days. Most all these cases are outpatient.

Angelica Ladd:

Okay. Thank you. Is there an age when people should no longer get fillers?

Dr. Michael Tantillo:

No. No, I mean, filler, it's like all aesthetics. I mean, fillers are not harmful at any age. Every patient's different. I mean, certainly as patients get a little older, fillers might not have as much effect. If the skin's inelastic and it's not going to respond to the filler or there's extra skin that's a little bit lax, then now it might be time for surgery. But again, most facelift surgeries that I do these days involve fat transfer at the time of facelift, so it's not a hyaluronic acid, off-the-shelf filler. It's a filler with a patient's own tissue.

Angelica Ladd:

Just a quick question about if someone is going in and they're beginning the process to look for a plastic surgeon. What should they be looking for in their plastic surgeon, and what questions should they be asking?

Dr. Michael Tantillo:

Well, as I mentioned, board certification. You want to make sure that somebody is trained properly. You want to make sure they have proper credentials, and a good proxy for that is the surgeon should be credentialed to do the work in a hospital, even though she or he might be doing it in an office or a surgery center. It's like you can set up your office and it's really kind of the Wild West. If you can talk somebody into doing a procedure in your office, then it can, most of the times, actually, quite legally be done. But the hospital is just kind of a vetting process. If that person can do that procedure at the hospital, then you as a patient know, well, somebody else has decided that this surgeon is qualified to do that procedure.

There's a lot of really good, really well trained plastic surgeons out there. Much of it is personality match. Do you like the person? Does what the person's saying make sense to you? Obviously, there's a zillion before and afters out there. Hang on one second. Sorry. Oh yeah, so before

and afters. They're all over the place these days, the web and social media and all that jazz. So obviously, if you don't think the person does very good work, then you wouldn't spend money there.

Angelica Ladd:

And then you've talked a lot about the criteria for insurance coverage. Somebody was specifically asking about ... and I don't know what this is ... but panni, P-A-N-N-I?

Dr. Michael Tantillo:

Right. So a panniculectomy is removal of excess lower abdominal skin. It's distinct from an abdominoplasty in that a panniculectomy doesn't involve translocation of the bellybutton. Most people want their bellybutton kind of in the middle of their abdomen where it was. And it doesn't involve tightening of the rectus muscles, the two sit-up muscles, which are separated. That's the weak part of the core, and so particularly with pregnancy when the uterus is pushing out, that part right in the middle of the anterior abdomen is what gives, so to speak. So those muscles aren't repaired, and then there's not the contouring work laterally and out to the sides and more around. I mean, almost every abdominoplasty I do has some liposuction with it because it's a very complementary procedure.

So it does get into ... there are different codes for a panniculectomy and abdominoplasty, so sometimes the insurance company will pay for the panniculectomy and not for the abdominoplasty. Then it's a discussion between patient and surgeon. Is the surgeon just going to offer only a panniculectomy, and if so, will that be acceptable to the patient? Like for example, I won't do just a panniculectomy because it's not a very aesthetic result. I mean, look, patients are going to go back, their primary care doctor's going to see them, their friends are going to see them, and it's just not going to look good, so I don't ... "Hey, where'd you get that?" But there are certainly surgeons who will do just a panniculectomy, yeah. Absolutely.

Angelica Ladd:

And if you have any more questions, please feel free to use that Q&A box and we are happy to answer any other questions that you have.

Dr. Michael Tantillo:

Oh, can I see this? It looks like we have one.

Angelica Ladd:

Yeah, you can take a look in there. We have a thank you, Dr. Tantillo, for the awesome explanation.

Dr. Michael Tantillo:

Oh yeah. You're welcome.

Angelica Ladd:

Does anyone else have any questions on anything that they saw today? If not, then I'll just let you offer any closing remarks.

Dr. Michael Tantillo:

Well, yeah. Thanks for coming. Thanks for your attention. It's kind of weird not having the feedback of the audience, but these are the times. So I hope it was informative, and if there's anything we can do, questions we can answer, just reach out to ... Do you have our phone number? It's on the web somewhere. I don't know what the phone number to the office is. But we're happy to answer any questions you have and certainly see you in the office. There's two of us in Manchester. Dr. Shankaran works in the Manchester office as well. She's super, super, super, and so yeah, we should be able to take care of whatever comes our way. So yeah.

Angelica Ladd:

Yeah, and we have that survey as well that's going to come to you at the end of the presentation, and it will also come to you in a followup email. If you have any additional questions, you can feel free to ask them on that survey, and just leave your contact information, as I said, so that we can get back to you. Then I did want to give you the number for Dr. Tantillo's office. That number is 603-629-1837. If you have any questions, I'm sure that will be helpful.

Dr. Michael Tantillo:

Yep. And also, that's Dr. Shankaran's number, so she's there. And Alex Moore is the third member of our team there. She's our physician assistant who's in the office every day. So all of our patients get to know Alex and Alex takes great care of them as well.

Angelica Ladd:

Excellent. Well, thank you all for attending today. We hope that you have a really great rest of the evening. It's still sunny outside. We'll look forward to hearing from you in the future. Thanks so much, Dr. Tantillo, for your time and your expertise.

Dr. Michael Tantillo:

Thanks guys. Have a good night. Buh-bye.

Angelica Ladd:

Take care.

Dr. Michael Tantillo:

Bye.