

Dr. Ronit Malka:

Hi there and welcome back to another episode of ENT in a Nutshell. My name is Ronit Malka and today, I'm joined by Dr. Scott Chaiet to talk about gender dysphoria. Thanks for being with us, Dr. Chaiet.

Dr. Scott Chaiet:

I'm glad to be here. Thank you.

Dr. Ronit Malka:

So first off, can we briefly define gender dysphoria and how it's treated in broad strokes?

Dr. Scott Chaiet:

So gender dysphoria is a DSM-5 diagnosis that is ... And I'll just cite off the actual definition for our listeners. It's a marked incongruence between one's expressed or experienced gender and the assigned gender. This incongruence has to exist for at least six months in duration and importantly, it has to be associated with clinically significant distress or impairment in social, occupational, or other important areas of functioning. So like other DMS-5 criteria, there has to be something that is bothersome, in this case, an incongruence between gender and sex assigned at birth and it has to cause some type of distress. The important thing to know about people who experience gender dysphoria is that, first of all, not all patients who identify as transgender or gender nonconforming will experience gender dysphoria, but for those who do experience, there can be many different types of treatment.

Dr. Scott Chaiet:

This is not a one-size-fits-all model. So for some, mental health support is very important, hormone therapy also known as gender-affirming hormone therapy, and then for some can be absolutely essential for treatment of gender dysphoria, gender surgery, previously referred to as gender reassignment surgery, is now more commonly known as gender affirmation surgery or gender confirmation surgery where we are helping to affirm or confirm someone's lived gender that they experience. Those can be things such as top surgery, breast augmentation or reduction, genital surgery also known as bottom surgery, and then in regards for our discussion today, there is facial plastic surgery which can be either feminizing or masculinizing. Then I'll just add that another part of this that's relevant to otolaryngologists is the world of voice and that can include voice therapy as well as voice surgery which is always performed in combination with therapy.

Dr. Ronit Malka:

And at what stage or stages in their treatment processes do these patients present to your clinic for facial feminization or masculinization?

Dr. Scott Chaiet:

That's a really interesting question and I think that we see a huge variety of patients. The barriers that patients have experienced, not only societal barriers for transitioning and coming out to express their gender in their lived experience, but also in insurance coverage. For example, what I mean is in the last few years, Medicare and Medicaid plans have started adding more coverage. So I've seen more patients who present to transition in their 60s, something that is a very different patient population of course than someone who is in their teens, 18, 19-year-old years or in their young 20s. But importantly, all patients who come in, we are seeing them as part of a multidisciplinary team. The patients often have

completed hormone treatment for a few years and for some that haven't started any hormone treatment, they might be just seeking information in consultation to know what's in the future and what they can expect from medical treatment with hormones, what goals they might be able to address from surgical treatment from us in facial plastic reconstructive surgery.

Dr. Ronit Malka:

Moving onto the pathophysiology, what are the major defining characteristics of a masculine or feminine face that you're considering in these patients?

Dr. Scott Chaiet:

There's two things to consider when we see a patient. The first is to ask the patient what causes them dysphoria. This is certainly patient-centered care. The patients might explain there are certain characteristics that cause them intense dysphoria, and certainly that will be the patient's priorities. The other thing that a patient might express to you is something that causes them to be mis-gendered or even could cause them to have fear of their own safety because of mis-gendering and putting them in a situation where someone might mis-gender them and they fear violence against them. So oftentimes, patients will have a very good idea of what are the things that cause them to be mis-gendered or things that cause them dysphoria when they look in the mirror.

Dr. Scott Chaiet:

The second is there is one important piece of literature that was done by Dr. Jeff [Spiegel 00:04:43] who has published quite a number of pieces of literature that are very important to this field. In an article by Dr. Spiegel, he morphed upper third, middle third and lower third of patients. He took very different types of faces and morphed them and asked random passersbyers that are cis-gender observers to rank the femininity of changes that were morphed to the upper third of the face, middle, and lower third. What he found by random passersbyers is that morphed pictures of changes to the upper third of the face including the brow bone, the eyebrows, and the shape of the orbital rim were rated with the highest femininity. So I guess to put all that together, I would always say we should look at the patient's preferences as the most important as we do in most of our field, and secondly if a patient is wondering, "What do I ... Where do I start to be recognized for femininity the most," then upper third has been shown at least in one study.

Dr. Ronit Malka:

And are there any facial targets in particular that you're keeping in mind when assessing these patients?

Dr. Scott Chaiet:

I like to go back to a lot of our facial plastics training and think about the face in the horizontal thirds. It allows us to go through any kind of systematic analysis when I'm thinking about what can be offered for the patient. It's a little daunting to start to analyze someone's face when you're thinking about not only patients who present at an older age. You're thinking about facial aging, but you're also thinking about all of the aspects of the face that either feminize or masculinize the face. For example, if we use the horizontal upper third of the face as a starting point, we have everything from the hairline, the hairline shape as well as the hairline position, the length of the forehead, the frontal bossing. So this is the shape of the frontal bone or more specifically it's the anterior [inaudible 00:06:41], the frontal sinus as it continues with all of the frontal bone, and as that continues more laterally, the superolateral orbital

rims, the overhanging orbital rims that make a more masculine shape or when reduced, a more feminine shape.

Dr. Scott Chaiet:

So as I think about the upper third of the face, there's a tremendous amount of change from hairline to bony changes to soft tissue changes of the forehead height to brow position that I didn't mention. Brow position can also include brow shape to be more feminized or masculinized depending on the peak, as well as the orbital aperture. There are a few oculoplastic surgeons that are out there that can also help with other gender makers. As we know, the intercanthal distance as well as the angle from medial canthas to lateral canthas have slight differentials between stereotypical male, stereotypical female faces. So the smaller intercanthal distance and the more, the higher the angle can be recognized as more feminine for some really intricate orbital changes that I personally don't do, but have colleagues who can help in the oculoplastics world.

Dr. Scott Chaiet:

As we move on, I think our training helps us become very comfortable in the middle third of the face, everything from the cheeks. So we can recognize in our cis-gender population of aging face patients. We recognize soft tissue ptosis. We recognize the [inaudible 00:08:12] deformity at the cheek-lid junction. These are things that we're comfortable noticing and things that we are comfortable treating. So if we think about just the stereotypical male face, the stereotypical cheeks have a flatter zygoma, creating a more square face where the female face has a more pronounced zygoma, a more triangulation or a more heart-shaped face. Rhinoplasty is the next part of the middle third that I think we would feel very comfortable with with analysis, and that's everything from the overall shape, the shape of the dorsum, if there's a hump, the nasolabial angle. The nasofrontal angle is quite important especially as we think about that frontal bossing that can occur more superiorly, as well as the tip projection and nostril size.

Dr. Scott Chaiet:

The lower third of the face, we can first think about the lips. Again, this is something that we would feel very comfortable thinking about the amount of red lip and the amount of tooth show. The procedures that can also address the lips can talk about the upper lip length. That would be a lip lifting procedure to be able to create fuller lips but also a shorter white lip and more vermilion and incisor show. As we move down to the chin and the jaw, I personally find this area a little bit more troublesome to be able to define what is the "more masculine or feminine" shape because we have so many cis-gender models in our society, especially I always give examples of Catherine Zeta-Jones, because there's a lot of cis-gender women with very wide, prominent jaws. Although if we were to think about this in terms of what characteristics are generally stereotypical male, it would be a broader, wider chin, more chin projection, more mandibular flare at the angles, kind of the angles being more flared laterally and more inferiorly, and then larger masseter muscles. In contrast, the more stereotypical feminine chin is narrow and pointed with less projection and softer angles, but I do also give the caveat that there's a lot of variation, especially in popular society.

Dr. Scott Chaiet:

Finally, the neck, our analysis is similar to aging face patients. There might be soft tissue ptosis. There might be some redundancy of platysmal banding in the soft tissue, but most importantly for our gender patients is the prominence of the thyroid cartilage. We know that the thyroid cartilage enlarges at the time of puberty to become more prominent anteriorly and a more acute angle where the thyroid

cartilage in those who don't go through puberty or don't have the exposure to testosterone, the thyroid cartilage will be a more obtuse angle and less prominent. Hope that gives our listeners a good idea of things that we are so used to looking at through our training, but now looking at things through the eyes of the stereotypical male attributes and stereotypical female attributes for the patients who are presenting to us whether they are seeking more feminized face or even, although rare, consultations for the more masculinized face.

Dr. Ronit Malka:

Is there anything on your differential diagnosis that would be relevant in deciding whether to proceed with facial gender-affirming surgery?

Dr. Scott Chaiet:

So for the patients who come to our offices and present without history of hormone therapy, it's important to remember that for those seeking to feminize their face, there will be a great amount of soft tissue changes experienced through the exposure to estrogen with or without testosterone blockers like [spironolactone 00:12:01]. The skin envelope will change and more importantly for our work in trying to create a feminine shape, the cheeks will change with fat redistribution. One thing that you can think about if someone is anxious to begin the process of transition, soft tissue fillers are fantastic because we can use something like hyaluronic acid to give some cheek volume which may last between one to two years at which time the patient can be on estrogen and having fat redistribution.

Dr. Scott Chaiet:

So I think just thinking about medical management, what hormones will do, and asking patients how long they've been on it. Of course, hormones won't change the bony structure or the cartilaginous structure of the thyroid cartilage. The patients who present with masculinizing surgery will have a tremendous amount of skin and soft tissue changes from testosterone. Most notably for recognition of masculinity, they'll grow facial hair although this may take months to years, and they will also experience voice changes that unfortunately is not experienced through the use of estrogen in the patients with gender identity of feminine.

Dr. Scott Chaiet:

The last thing just to mention is in our differential diagnosis besides when deciding whether to proceed with facial gender surgery is should there be any emphasis on involvement of a mental health therapist or any letters of readiness. In the WPATH Standards of Care 7, that's the World Professional Association for Transgender Health, in their last volume of standards, SOC7, there is no requirement for a letter to be written for facial surgery. However, WPATH has a beautiful quote that I usually mention to every patient that facial gender surgery is often undertaken with the guidance of a therapist. WPATH does not say a letter has to be written and mental health has to be involved, but I think the patients who don't feel supported or have expectations that you do not feel that can be met or just people who have a lot of emotion which unfortunately are many or most of our patients transitions who have dealt with discrimination, et cetera in their life, I think mental health is not a requirement, but strongly recommended. Patients often will be nodding along with you when you ask about his and talk about how they're supported and their support structure and the support that they have.

Dr. Ronit Malka:

And I think that's a really good segue into my next question of whether there's anything you're paying particular attention to on history of these patients.

Dr. Scott Chaiet:

When we see these patients, I think there's the ... The first few minutes can be a little intimidating for those who've not taken on gender patients. The simplest things to do for our listeners just to remember is you can simply introduce yourself, provide your pronouns which I apologize, I didn't do at the beginning of this session. So I would say, "My name is Scott Chaiet. My pronouns are he/him. What name shall I call you and what are your pronouns?" So it's a nice icebreaker to tell people that you understand the importance, and I also spend some time talking about nondiscrimination policies. They're posted in our office. There are some things that the patients will feel more comfortable with before jumping into talking about their dysphoria.

Dr. Scott Chaiet:

Similarly, I think some general questions about, "Have you had facial surgery? Have you had fillers? Have you had lasers? Have you ever had facial trauma," are questions that we feel very comfortable with asking. Again, they are things that we can do to kind of ... One, we can replicate what we're used to, just taking a good history and physical exam, and two, talking to patients before jumping into what causes them dysphoria which, even in our exam rooms, can cause a little bit of discomfort for the patients because of the emotion attached to it, their dysphoria. The last thing just to mention as I said earlier is asking about hormones, specifically the length of time on estrogen for the patient transitioning to a more feminine changes for a more feminine gender or length of time on testosterone for those masculinizing.

Dr. Ronit Malka:

In the literature, there's some discussion of real life experience trials of patients living as their desired gender or their new gender for a period of time and demonstrating ability to live in that role.

Dr. Scott Chaiet:

Yeah.

Dr. Ronit Malka:

Is that something that you experience frequently as a provider as being important or necessary in your work with these patients?

Dr. Scott Chaiet:

It's so interesting, the heterogeneity of the patients that present, and I'm in Madison, Wisconsin so not a huge city, but certainly a lot of rural areas and we pull from people who are coming from different socioeconomic statuses and certainly from more rural and some more urban settings. The patients who present will have oftentimes ... This might be their first interaction in seeking a transition and may have a very, very clear understanding of what causes dysphoria and what they would like to change. So for that patient who may, due to their job, their living arrangements, et cetera, not have transitioned, they may have a very good idea of exactly what causes dysphoria and what they wish to change. I think in the way that we try to have a patient-centric informed consent model, and informed consent model is a topic that WPATH discusses where we allow the patient to make their decisions, informed consent,

some patients will have not lived in a real life experience in their own gender identity due to those things I mentioned wherever they're coming from in life.

Dr. Scott Chaiet:

For others, there are people who have not had real life experiences and it's clear just in discussing that they are just information-seeking or they really don't understand the healthcare process yet. Then that's kind of a different gear that I would shift into and we have a gender coordinator, we have a whole gender care team getting them plugged in with mental health therapy. So I think that it comes down to your belief that the patient has a good understanding of their own goals and respecting it. WPATH does not require people, any patient to live as their gender identity for any length of time for facial surgery. It does, however, require this for genital surgery. It is hotly debated because there are some who do not agree with that because they believe in informed consent model where if the patient is able to consent with risk-benefits alternatives like any other procedure, then they should not have to jump through hoops. I think for us as facial plastic reconstructive surgeons or for our laryngology colleagues, I think it's more of just an understanding of the patient goals and if they need support from other resources that are part of a comprehensive gender care team, getting them those resources before jumping into surgery.

Dr. Ronit Malka:

And in terms of diagnosis, how is gender dysphoria diagnosed and are there any additional diagnostic criteria that need to be met for surgical intervention?

Dr. Scott Chaiet:

So as I previously mentioned, we do have a DSM-5 definition for gender dysphoria which is the marked incongruence between one's own expressed or experienced gender and that which was assigned at birth. So we as otolaryngologists do not have to make that DSM-5 diagnosis. I rely just on the patient simply telling me what causes them dysphoria, how it affects their quality of life, and to that end, WPATH, as I've mentioned, does not require a letter from a mental health therapist, but I think a lot of, at least in the Midwest a lot of our insurance carriers here, they do require a letter which sometimes can be a roadblock for patients to have to get a letter just because the insurance carrier wishes to see that before providing coverage even though WPATH does not require it. So oftentimes, I will not have to be the one, we will not have to be the ones to make the actual diagnosis. That is certainly ... Any DSM diagnosis is not often made in the surgeon's office, but we employ a team working very collaboratively with our mental health colleagues.

Dr. Ronit Malka:

Moving onto treatment options, we've touched on this a little bit already, but we can break this up into feminization and masculinization procedures. What are the main surgical options you offer for patients undergoing facial feminization?

Dr. Scott Chaiet:

So I'll continue to break this down from a superior to an inferior kind of as I follow in my own training of the horizontal thirds and perhaps that'll help the listener. The forehead is an area where we have the ability to make so much changes. The incision is often pretrichial incision, pretrichial, and allows you to excise a strip of forehead soft tissue to either perform hairline advancement, change the shape of the hairline, but simultaneously by removing skin, you can perform a brow lift. Once the soft tissue envelope

is elevated, you can spend a great deal of time contouring. These have been traditionally divided into type one, type two, and type three. This is based off of the anatomy of the frontal sinus, something that we feel very comfortable analyzing and working around. I will often get an x-ray if the patient doesn't have any prior CT imaging or x-ray imaging of the forehead. I believe in my own practice to view imaging is sufficient of plain x-rays without having to undergo CT imaging to get an idea of the prominence of the frontal sinus and more importantly, the thickness of the anterior table.

Dr. Scott Chaiet:

Type one, just for the listeners' education, type one, frontal cranioplasty is for a patient who has minimal frontal bossing and has a thick enough anterior table that you don't worry about getting into the frontal sinus and violating the mucosa. For those who have a quite prominent frontal sinus bossing with anterior projection and/or have a very thin anterior table, a type three frontal cranioplasty is the surgical removal of the anterior table and setting it back which is pretty much what we do in a osteoplastic flap aside from the contouring and shaping of the forehead, so again just to speak to procedures that we feel very comfortable doing. While the arcus marginalis is taken down and the superolateral orbital rims are exposed, there's a great deal of contouring that can be made on that supraorbital ridge to reduce and create quite a difference in the orbital aperture of the soft tissue. So all that is re-suspended, the brow position can be feminized with an arch, or for those who may have a more feminized gender but maybe not hyper feminist, maybe someone ... I saw a patient recently who wanted to have a more androgynous appearance. They wanted a flatter brow. This is something that can be customized for the patient experience.

Dr. Scott Chaiet:

The middle third of the face, I think rhinoplasty has techniques that we are all familiar with. Regarding cheeks, something that has been a more historical treatment has been osteotomies. The gender patients will frequently, the community will frequently talk about cheek implants. Cheek implants are something that people, patients will often ask me about, but is something that I personally prefer not to do because of the permanence and the inability to sculpt as a surgeon and the long term viability in terms of their prominence in a younger patient as the patient will age, what it will look like. So we can use things like filler administration in clinic or autologous back grafting to help with cheek shape.

Dr. Scott Chaiet:

Moving onto the lower face, as I mentioned earlier, the upper white lip is a great area to be able to create a feminized upper lip with a lip lift. That can be an incision either done simultaneous or separately from rhinoplasty. It can be incorporated into your transcolumellar incision. Lip augmentation is something obviously that we feel comfortable with and can be done through any of our center techniques.

Dr. Scott Chaiet:

Lastly for the face, there are chin and jaw procedures. Chin reduction can be done by transoral procedures with or without a chin implant, educating the patient of course on the need to be cautious about over-reducing the chin and creating an apparent increase in nasal size. So we can create all sorts of shapes in the chin, but you also have to be cognizant of the harmony of the whole face. I myself don't perform a lot of mandibular reconstructions with reduction of the angle. I have a wonderful colleague who was trained in craniofacial surgery and does a lot of sagittal split osteotomies of the mandibular ramus and she feels very comfortable in this area at shaping. Working in an academic institution with a

wonderful gender care team allows me to, say for people who want angle reductions, to be able to work with a co-surgeon.

Dr. Scott Chaiet:

Finally for laryngeal prominence for the [inaudible 00:26:57] cartilage, that is the chondrolaryngoplasty. The incision is hidden in the cervicomental angle. It's important to make sure that's hidden and not going to be tethered to the incision where it can be seen and seen moving. The author who I mentioned previously, Jeff Spiegel, has an excellent publication on the surgical technique that I would encourage all listeners to preview where an LMA is placed during the operation and a needle is placed through the thyroid cartilage from anteriorly through the cartilage and into laryngeal, into the airway. This gives us great assurance that the needle that were placed should be above the vocal fold attachments at the [intercommissural 00:27:44]. A scope is placed through the LMA and the needle is visualized above the level of vocal folds to make sure that we don't jeopardize the attachment of the vocal folds. The other parts of the neck that can be performed of course are for patients with aging face concerns, but I think that would be outside of the header of facial feminization.

Dr. Ronit Malka:

And how about treatment options for facial masculinization?

Dr. Scott Chaiet:

Well I don't have a lot of experience and I don't know a lot of my colleagues who have a great deal of experience because these are rare consultations. The effect of testosterone is fairly profound at creating facial hair and recognition of masculinity in facial structures. The procedure that I have performed most commonly and discuss with patients is actually something that we would think about in more of the cis-gender population and that is a buccal fat excision. So while I suppose you could think about changes to the upper third of the face, changes to the nose, changes to the lower third of the face, or all facial recognition of a masculine shape is a more square shape. A more feminine face is a more rounded or more heart shape. So buccal fat excision has been a technique I have employed to make a pretty drastic change in the overall appearance and not having to focus on smaller angles such as the angles of the nose, etc.

Dr. Scott Chaiet:

So I will say that I don't think that there's a great deal of literature. There are a few chapters that are excellent for the listeners to do more reading, but it is a rare consultation. So rare that when the US Transgender Survey, the USTS, queried 27,000 transgender, gender nonconforming individuals in 2015 about procedures that they had thought about performing or had performed, things like voice therapy, voice surgery, facial feminization, and tracheal shave also known as [laryngochoondroplasty 00:30:08] were all assessed for the patients looking to feminize the face and there were no questions asked for the patients looking to masculinize their face. So on a huge population basis, we really don't even ask the question how often patients who are seeking to masculinize facial features. We don't even ask that question. So it is rare in my experience and those of my colleagues that I speak with, but there is certainly literature to help understand other changes besides the one I mentioned.

Dr. Scott Chaiet:

One other thing that you could consider as something else that just came to mind is genioplasty and chin implants as these are things that we do in our rhinoplasty practices in our cis-gender patients to be



able to augment the chin and create a more masculine shape as well, kind of getting back to that overall impression of recognition of masculine face.

Dr. Ronit Malka:

What defines a good outcome in these patients and similarly, are there any metrics you use to quantitatively grade outcomes?

Dr. Scott Chaiet:

This is a great question. It's something that we really don't have a great deal of evidence for. The challenge that I face on a day-to-day basis is not having excellent patient-reported outcome measures in the literature. There are a few publications that have used validated surveys and for every one paper that has used a validated outcome measure, there's another five papers that have looked at facial surgery that have used non-validated. So I don't use any graded quantitative measures precisely because there's not one accepted.

Dr. Scott Chaiet:

About your question of what defines a good outcome in these patients, I don't know that my own, in my own hands I have a longstanding relationship with these patients. I don't know that a graded outcome measure, although I find them to be extremely important to be able to publish literature and convince those who wish not to cover these surgeries in the insurance world, I think the research is paramount for us to have good publications, but not having a well-accepted scale, not having one that's widely accepted in the literature makes it tough for me to adopt one and to improve my patient outcomes and patient measurements of their patient-reported measures.

Dr. Ronit Malka:

We have discussed complications of many of these procedures separately in prior podcasts, but are there any additional complications you're looking at for with facial gender-affirming surgeries?

Dr. Scott Chaiet:

One thing to consider as we try to create the best outcome for patients and address multiple sites of gender dysphoria is how do we combine procedures. I think a lot of these procedures are associated with complications that the listener will be familiar with, but it's when we start bringing procedures together, do we add surgeries together that go over six or eight hours and transition us from ambulatory surgery into in-patient surgery? What do we risk from an outcome of facial harmony if we don't do, say, the rhinoplasty with the chin at the same time? But we feel what if you're doing forehead, rhinoplasty, lip lift, chin, tracheal shave, thyroid cartilage laryngoplasty? How do you not operate for 12 hours? I'm certainly not capable of operating for that long and I certainly don't think it's safe for our patients to undergo that many hours of surgery.

Dr. Scott Chaiet:

So rather than listing off complications that I think our listeners would be familiar with for each aspect of the standard postoperative complications, I would just think, I would just ponder out loud that the challenge when putting together all of these procedures is figuring out what to do when and how to create the best outcome by putting the right procedures together at the right time so that we as surgeons can create a balanced, harmonious face with excellent outcomes.

Dr. Ronit Malka:

Thanks so much. That's a consideration, I think, that is extra that we don't necessarily always think about. What does followup look like for these patients typically?

Dr. Scott Chaiet:

I'll typically see the patients back in a standard fashion. The patients who undergo brow lift surgery are seen back in two to three days, and then all patients are seen back at the seven to 10-day mark, one month, three month. For many patients who live at a distance, we'll do a more spread out approach. I'm hoping that video consultations and video followup will make its way into our practices more given the pandemic around us right now and kind of the more acceptance of video consultations, but I do have quite a few patients who come at a distance and limit their followup just due to that aspect that we would see in any other part of our care.

Dr. Scott Chaiet:

The importance of followup I do think is for those patients who, as I've mentioned, we split up their surgical procedures into sequence of two different surgical dates. Finding the right balance of how many surgeries to do at once and splitting up time so that the patients have enough time for followup, looking for any early complications, and having time for enough edema to go down to be able to safely proceed with the next surgical procedure. I know that can be different from any surgeon's hands to look at that time, but I hope that gives a broad overview of followup. The difference, I think, for this patient population is the need for sequenced surgery if not all procedures can be performed at once.

Dr. Ronit Malka:

And finally, we've talked a lot about the anatomical and surgical aspects of transgender care, but gender dysphoria has a major impact on patients' lives and affects nearly every aspect of their daily lives. Research surrounding gender-affirming surgeries and the number of surgeons offering treatment for transgender patients is increasing, but there are still significant barriers to these patients receiving care. Can you comment on those barriers and what we can do as surgeons to improve our care of transgender patients?

Dr. Scott Chaiet:

Yes, that's such an important question. First, I'd like to thank you for the opportunity to speak today and thank all the listeners for listening because have unique training for many of the procedures that have been discussed today. These are procedures on anatomy and on bony anatomy, soft tissue anatomy that we feel very comfortable with. So using our training to be able to offer patients life-changing treatments to alleviate gender dysphoria is something that's not only very meaningful, but also quite important in terms of patients' quality of life, their psychological wellbeing, and oftentimes their own safety for being able to live their full life and their own gender without any fear of safety concerns.

Dr. Scott Chaiet:

I will just cite a few numbers from the US Transgender Survey, that 2015 survey of 27,000 transgender, gender nonconforming individuals, and in that survey, I think I'll just spend a moment on two different sets of numbers. On all patients who were asked who sought out surgical care, and that could be for feminizing or masculinizing on any part of the body, 55% in 2015 were denied coverage for transition-related surgery. So this doesn't even include the patients who don't have insurance, but of those who do have insurance and who sought surgical care, 55% were denied coverage. Then pertinent for the lecture

today, 21% found coverage from their healthcare insurance plan, but had no surgical providers in their network. So that coverage and access issue gives us great meaning in our ability to change that curve, especially being a provider in network for these patients for access.

Dr. Scott Chaiet:

The second numbers that I'd like to just present to the listeners, when patients were asked of those who responded with male on their birth certificate, so these are people who are seeking feminizing transition procedures, 11% had already had voice therapy and 6% female feminization surgery, 4% tracheal shave, and 1% voice surgery. But an astounding 46% wanted voice therapy, 39% compared to 6% wanted facial feminization surgery, 29% wanted tracheal shave versus 4% had it, and then 16% wanted voice surgery compared to 1%. So we're looking at a fourfold difference in number of patients who've had these procedures versus those who want it. This might even be a bigger, more dramatic change because for some, it's maybe not even something they could consider even attainable so there might be even more patients who want these procedures. They just don't even list it as want it some day because it's unattainable due to either lack of insurance or insurance coverage.

Dr. Scott Chaiet:

So I'll just remind the listener of the importance of this work, the meaning that it gives, and how much we can change lives of patients by providing competent care, but also using our expertise to help bridge that gap between so many patients out there who are experiencing dysphoria, experiencing that permanent distress to either their voice or facial structures or neck structures, and being able to offer these procedures gives us the ability to make real change. Additionally, we must continue to work on the barriers to care on the insurance front that are around us that we as surgeons certainly have a role to play in getting more research surrounding gender-conforming surgeries, being able to identify good validated outcome measures on a wide scale to be able to show indeed that these do create permanent, long-lasting improvements in quality of life, and show our insurance carriers that this is medically necessary surgery for our patients.

Dr. Ronit Malka:

Well thank you so much, Dr. Chaiet, for all of these really wonderful insights. Before we wrap up and summarize, was there anything else that you wanted to add or think we could expand upon?

Dr. Scott Chaiet:

The only thing I would mention to the listeners is that there is certainly a learning curve to working with gender patients, and I have made such deep, wonderful friendships with some of my patients and community advocates. I would just tell the listener that you don't have to feel alone if you embark in this process. Reach out to your local gender care team, mental health therapist, or primary care providers. They are wonderful advocates in creating a network that you can collaborate with. You can certainly gain more experience with understanding the nuances of at what age to treat patients, being able to incorporate your surgical skills into this set of patient care needs, things that you can do in your office to make your office more competent and in your care with your intake forms.

Dr. Scott Chaiet:

Bottom line, you don't have to do this alone. You can make great connections. Wonderful, multiple inroads can be made within your community with patient advocates and with your community leaders. It's really quite fulfilling and it takes away a little bit of the anxiety of having to enter into a brand new

space on your own when you have a whole care team to be able to do it with. So I'll just leave it on that positive note and hopefully an inspiration for those who are interested and have not yet embarked in this important work.

Dr. Ronit Malka:

Well thanks so much for being with us today, Dr. Chaiet.

Dr. Scott Chaiet:

It was my pleasure. Thanks so much for this opportunity.

Dr. Ronit Malka:

As a brief summary, gender dysphoria is a DSM-5 diagnosis of clinically significant distress or impairment secondary to a patient feeling incongruence between their assigned gender and their experienced or expressed gender. A multimodal treatment plan based on patient preference and need is recommended and may include hormonal therapy, mental health support, and gender-affirming surgeries which, for the otolaryngologist, generally revolve around facial plastic surgery for facial feminization or masculinization and laryngology procedures for voice feminization. A patient's goals for facial plastic surgery can revolve around dysphoria or a personal dissatisfaction with a facial feature or features or concern about being mis-gendered by others.

Dr. Ronit Malka:

When assessing the face for gendered appearance, we often assess in thirds with the upper third generally thought to have the biggest impact on gender perception overall. Facial feminization procedures are usually much more common than masculinization procedures largely because of the masculinizing effects of testosterone hormone therapy on facial features. A number of different procedures are often undertaken including forehead and supraorbital ridge contouring, scalp advancement and brow lift in the upper third, rhinoplasty, mid-facial osteotomies and cheek implantation in the middle third, and lip augmentation, chin reduction or advancement, and mandibular reduction or osteotomy in the lower third. Chondrolaryngoplasty, also called a tracheal shave, is commonly employed in feminizing gender-affirming surgeries to reduce the prominence of the thyroid cartilage.

Dr. Ronit Malka:

In addition to these standard facial plastics postoperative complications like infection, bleeding, and patient dissatisfaction, surgeons performing gender-affirming surgery need to consider the cumulative effect and timing of multiple facial surgeries. Lastly, it should be repeated that there are significant social, emotional, and socioeconomic barriers to patients receiving appropriate treatment for gender dysphoria, and the number of patients desiring gender-affirming facial surgery continues to outpace the rate at which these surgeries are being performed.

Dr. Ronit Malka:

Lastly, we'll finish up with a couple review questions. I'll read the question, pause for a few moments to let you answer, and then answer the question. Starting off, which facial features are often attributed to a masculine-appearing face and which to a feminine-appearing face? See if you can name at least one per facial third. Specific facial features that are often attributed to a male-gendered appearance include frontal bossing, an M-shaped hairline, flatter eyebrows, greater intercanthal distance, flatter zygoma,

straighter dorsum or dorsal hump, smaller nasolabial angle, thinner lips with less vermilion and incisor show, more prominent mandibular flare and chin projection, and a more prominent thyroid cartilage. More feminine features are largely the opposite of these such as an O-shaped hairline, curved eyebrows, a more heart-shaped face, concave dorsum and [inaudible 00:46:23], fuller lips with more vermilion and incisor show, a narrower, more pointed chin, and minimal prominence of the thyroid cartilage.

Dr. Ronit Malka:

What is a major complication of chondrolaryngoplasty and what surgical techniques can be used to avoid this? Destabilization of the anterior commissure of the vocal cords can occur with chondrolaryngoplasty and is a debilitating voice outcome that is very difficult to reverse. External translaryngeal needle insertion into the thyroid cartilage under fiber optic visualization through an LMA can be used to identify the anterior commissure and prevent this complication.

Dr. Ronit Malka:

And to wrap up, which professional organization provides guidelines for the treatment of gender dysphoria? The World Professional Association for Transgender Health, also known as WPATH, is a professional organization that provides guidelines for the treatment of gender dysphoria and includes standards of care for medical professionals providing hormonal therapy, voice therapy, gender-affirming surgeries, and mental health support.

Dr. Ronit Malka:

Thanks again for joining us and we'll see you next time.