Primary care of the transgender patient

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Eric Welcome to OslerCast, Eric LaMotte here. It's been a while, too long, since the last episode. A few people have asked - what happened to the podcast!? I've been up to a few other things: finishing residency, applying to jobs, getting married, but looking forward, my goal is to release an episode at least once every few months. Since my clincical work is now in hospital medicine, the podcast may start to have more of an inpatient focus, but darn it, I was trained as a general internist, and I'm not goign to let that go without a fight. So I'll continue to cover some outpatient medicine as well, and this episode definitely falls into that category. I recorded this interview several months ago, but what better time is there than now, right now, for us to invest in being able to better care for some of our most marginalized patients. In this episode, we're going to learn basic practices in primary care for transgender folks. We'll focus on why and how to prescribe feminizing and masculinizing hormone therapy, and also discuss surgical options for trans patients. I was really lucky to be able to interview such a knowledgeable guest on this topic. I'll let her introduce herself.

Jessica My name is Jessica Rongitsch, and I'm a primary care doctor, I'm an internist, and I'm practicing at Capitol Hill Medical in Seattle, Washington. Capitol Hill Medical is a primary care clinic that serves the LGBT community, so we provide primary care, HIV care, care for transgender patients. I would say probably about 50% of my patients identify as transgender, maybe 60%.

Eric So this is a big part of your practice but what do you think a regular primary care doc should be able to offer to their patients?

Jessica That's a good question. I do feel that trans care hormone management is part of primary care, I feel that managing hormones really is within the scope of all primary care docs' skill-set. There are certainly nuances to providing trans care that I've learned over the years but I think basic hormone management is pretty doable for most primary care providers.

I've been doing this now for 12 years, and there's no question in my mind that this is a really necessary medical intervention, that people do really well with trans care and with hormones. We know that the suicide attempt rate in the trans population is astronomically high, it's 46% of trans identified individuals have attempted suicide, compared to 3% of the general population, and we know that providing hormones and trans care improves psychological health. We have the studies to show that it does provide benefit, so I in a way like to think of it as like an anti-suicide treatment.

I have had a patient recently who transitioned at a later age, she had a successful career in a male gender identity and decided to transition when she was in her 60s, and she has just done so very elegantly, and could not be happier and she told me that up until she transitioned, her life was in black and white, and now she sees in technicolor. And I see so many patients who are so grateful for the care that they are receiving, and just tell me again and again, how much happier they are, post transition.

Eric Wow, I knew this population was at risk but a 46% suicide attempt rate is shocking. We'll talk about prescribing hormone therapy in a little bit, but first can you introduce some of the important terminology for us to care for transgender patients?

Jessica Sure yeah definitely. So of course there's the term transgender, which basically just refers to someone whose gender identity doesn't match with the sex which they were assigned at birth, and then there's also the term that I prefer which is "trans*", and that is kind of an umbrella term that refers to all gender identities that are not the binary gender identities, so that refers to people who identify as transgender, as agender, as bigender, gender-queer, non-binary. There are so many different gender identities and I think that trans* really is a great way to use an inclusive term to refer to all the different gender identities.

Eric The asterisk in computing is used as a wildcard character, and so it's used the same way here. I realize this is really 101 level stuff but what about trans man and trans woman?

Jessica So transmasculine describes someone who's basically masculine of center, so someone could identify as a trans man, could identify as male, could identify as non-binary or just more on the masculine side of things. So it typically refers to someone who chooses testosterone therapy or top surgery for male chest reconstructive surgery, or a more masculine gender presentation. Trans-feminine refers to someone whose gender identity is more on the feminine side of the spectrum, so this could include hormones, this could include changes in gender presentation or dress, it could include surgery.

And I think along with terminology, I think it's important to include terminology to avoid, so I think transgendered is a term that I see often and that is a term to avoid, "transgendered" implies that, you know, something happened to a person, also I avoid terms like M to F, F to M. Because I don't see the person as an FTM, that person is a male, so I avoid those terms.

Eric Have you ever misidentified a patient's gender and whats the kind of appropriate, respectful way to acknowledge that and move on?

Jessica Mmhmm, that's gonna happen. Its inevitable. And I think its important to apologize, acknowledge that you made a mistake, but then to move on, so you don't want to embarrass the patient, you don't want to put it on the patient to then have to reassure you or make you feel better. So I find when that happens, I quickly correct myself, I say I'm sorry, and then I move on, and I try and make a note so that it doesn't happen again.

Eric I was reading the WPATH guidelines, and they distinguish gender non-conformity and gender dysphoria, do you find that to be a helpful distinction?

Jessica Yes, I think it's really important to note that you can be gender non-conforming, you can be transgender, but you can *not* have gender dysphoria. So gender dysphoria specifically is feeling discomfort or feeling uncomfortable in your body. And plenty of trans* people actually don't have gender dysphoria. They accept their bodies, they feel happy with their bodies, but they are not conforming to the binary gender system. And I think, you know, if you look at the history of the medical system pathologizing diversity, you can look back at the DSM and of course homosexuality was in the DSM for many years, and it was finally removed, and then transsexualism was put in the DSM, as a mental disorder, for many years, and then that was eventually changed to gender identity disorder, and then more recently that was removed and gender dysphoria is now in the latest DSM, which in a way is an attempt to keep it in the healthcare system, so that people can get insurance inclusion and can get care, when they are experiencing dysphoria. So i think we've seen progress over the years in depathologizing trans identities.

Eric So what kind of training does the support staff in your clinic receive?

Jessica I think it's important to train all staff members on trans sensitivity and trans competency, so it really starts when the patient walks in the front door. It helps for the front desk staff to be trained to ask for preferred pronoun, to ask for preferred name, we know with EHRs, usually the name that's in the EHR will be their legal name that's on their insurance, and there's a lot of reasons why someone might not change their legal name to their preferred name, usually it's financial, it's linked with their insurance, or their parents, so there's some reason why they don't want to do it, or they're not ready to do it, it costs money to change your name, and so it helps if your clinic has a system where you can record their preferred name and pronoun so that when they come in, they're referred to by their preferred name and their pronoun, the front desk staff and any assistants that come out to the lobby should be educated not to refer to people as Mr. or Mrs, not to gender them, sometimes if you don't know their pronoun or how they like to be gendered, we will just call out their last name only. I think there are good resources out there to train support staff, so Fenway has a good guide online as well as a video program under CARDEA, they have a good training program online for support staff. I think it also helps to look at your forms and see do your forms have male and female gender boxes, or is there a place where they can write in their gender identity, or write in their pronoun or preferred name.

Also when you're asking patients about their sexual history, taking a sexual history, you want to of course include questions such as are you sexually active with men, women, or both, but in my practice, that doesn't really work, because I have so many trans patients, waht I want to know about is their sexual risk, so I wanna know what body parts their sexual partners have, and what kind of sex they have, so I ask much more specific questions.

Eric Ok so we've talked about some important terminology, how to run the clinic from training the support staff to perhaps updating the forms and questions that you ask, Let's talk hormone therapy. How do you assess a patient's readiness to transition, I've heard different approaches, the traditional WPATH and the newer ICATH guidelines, is there a universally accepted standard or can you explain the differences between those?

Jessica I think historically there were really two different schools on that, there was WPATH that required a letter from a psychologist or required a patient to have a real-life experience where they presented in their desired gender for three months and then if that went well, which often it does not, just in terms of before transitioning, changing your gender presentation and then going to work, as per usual, you know, it doesn't always work out so well, but you would be required to either see a therapist or have a real life experience for three months before you could start hormone therapy, and then came along ICATH which is more of an informed consent model, where the patient didn't need to see a therapist, they would start hormones on the basis of informed consent. Fortunately in the latest WPATH guidelines, they actually um include informed consent as an appropriate path to hormones, so that's how I treat trans patients is through informed consent.
So i certainly think psychotherapy can be a very important part of transition, but its not necessary for everyone, and I also generally leave that up to the patient, I will recommend it, but leave it up to the patient to determine if that's something they're willing to do or not, so I prescribe hormones on the basis of informed consent, and as part of that process, I will do what's called a psychosocial assessment. According to the lastest WPATH guidelines, part of an informed consent should contain a psychosocial assessment. And that can be done by a primary care provider, that can be also be done by a mental health provider, and really you're trying to get a sense of the patient's support system, so I want to know, who's their source of support in their lives, are they married, do they have a spouse or partner, who is going to provide them with emotional support through this process. I also want to know what their housing situation is, do they have stable housing, are they at risk of getting kicked out of the house, if they come out as trans? I want to know what their work situation is like, are they at risk of losing their job, or facing harassment, if they come out as trans at work? So the psychosexual assessment is really kind of a thorough evaluation where I get a sense of what support systems the patient has in place. I don't do this as a way to kind of weed out who can take hormones or who can't take hormones, it's more just so I have a sense of the patient's baseline, and that's something that we'll follow up on at each visit.

Eric Informed consent, that's the standard of care for everything else we do in medicine, now it's also the standard for hormone therapy. So part of that is no longer needing to see a therapist prior to transitioning, and part of that is not needing this quote unquote "real life experience".

Jessica Yes so the real life experience is no longer required to start hormones, because really it can be pretty harmful for patients, because people don't generally just change how they dress and go to work. They generally will take hormones, kind of slowly feminize, slowly masculinize, and then when they're ready, they will come out, of course its really variable, some people don't do it that way at all, but I think to require someone to have a real life experience, consensus was it really wasn't very helpful. And psychotherapy can certainly be very helpful, but its no longer required. Now if you are a provider with no experienceand you are totally uncomfortable with this, and you're not quite sure how to do a psychosocial assessment, you could certainly get a mental health provider involved, and work more as a team, so I think that works quite well. I also if I have patients with significant psychiatric comorbidities, I will also definitely bring mental health on as a team, so I will make sure that the patient knows, this isn't in an attempt to gatekeep or to keep you from hormones, but when I want to have a whole team approach, so that we can do it as safely and as effectively as possible. So I will say, you know, if you had a cardiac condition, I would want a cardiologist on board. And since you have a psychiatric condition, I would like a mental health team on board as well.

Eric Informed consent's going to involve a discussion of the risks and benefits of treatment so lets talk about feminizing hormone therapy for transfeminine patients. What kind of changes can patients be told to expect with feminizing hormone therapy?

Jessica So many changes, so I will typically go through head to toe, they will not generally experience male pattern hair loss, they will have a change in facial fat to a more feminine facial fat appearance, but of course it won't change bone structure, it will not change voice, so many transfeminine people choose to do some sort of voice therapy, will not remove Adam's apple, it will not remove facial or body hair, so many people choose to do some form of laser hair removal or electrolysis, um feminizing hormones will cause permanent breast growth. And it will cause fat redistribution, so fat kind of away from the midline, into the hips and thighs, as

well as some softening of skin, and a decrease in body hair. Feminizing hormones will also cause testicular atrophy, which can be permanent, erectile dysfunction, and of course infertility.
I always recommend sperm banking for any transfeminine patient, because estradiol will cause permanent infertility, and sperm banking is pretty non-invasive and pretty affordable for many people, I won't say most people.

Eric Do patient's goals with feminizing hormone therapy vary, in terms of the effects they are trying to achieve, or the degree?

Jessica Certainly, there are some patients who are kind of more genderqueer, nonbinary, and they might want to take just a little bit of feminizing hormones and have just a little bit of feminization, and I have other patients who want as much feminization as they can possibly achieve, and some people choose to have facial femnization surgery or other surgical changes, so I think people's goals are really variable.

Eric How does the age of initiation of treatment affect what kind of effects can be expected?

Jessica Certainly if you start puberty blockers before you enter puberty, and then start gender-affirming hormones at a young age, you will have results that more closely resemble that of a cisgender person.

Eric And then are there any relative or absolute medical contraindications that you consider to treatment?

Jessica So really the only absolute contraindiations would be a hormone responsive malignancy that's active, or at high risk of recurrence, or an active thrombosis.

Eric So a patient with a history of venous thromboembolism would be OK for treatment?

Jessica That has come up in my practice before and typically I will involve a hematologist and get an assessment of whether they have a hypercoagulable disorder, and then usually will anticoagulate them before putting them on estradiol.

Eric K. So you've done that some.

Jessica I've done that, so its definitely a contraindication, it's not an absolute contraindication and with anticoagualtion, I've done that safely a few times.

Eric And then how do you go about starting a patient on feminizing hormone therapy, can you talk about which drugs you might prescribe and which doses?

Jessica Certainly so I will generally start with both estradiol and spirinolactone at the same time, I know some providers will start with just spironolactone to block testosterone before adding estrogen, and I don't do it that way, I usually will start both spironolactone and estradiol simultaneously, I will generally start spironolactone dose based on someone' blood pressure, their risk factors, their renal function. So if someone requires an ACE inhibitor, I will avoid spironolactone, if they have renal insufficiency, I will also avoid it, if they have low blood pressure to begin with, I will move a little more judiciously. But typically I will start 50mg a day for about a week, and if they're tolerating it, I'll have them increase to 50mg twice daily. With estradiol I will usually start pill form and have them dissolve it sublingually under their tongue, or I will have them start a estradiol patch if they're higher risk, and I will usually start 2mg estradiol tablets, one tablet dissolved sublingually per day, or an estradiol patch 0.1mg change twice weekly. So I generally use estradiol, I avoid ethinyl estadiol because of increased risk of thrombosis, and I also avoid using premarin because its harder to monitor estradiol levels and also, it's made from horse's urine.
Sometimes when we're getting started we will also add finasteride to try and help with alopecia, 1mg so the most affordable way to do that is to break a 5mg tablet into quarters. And of course once you suppress their testosterone, then it's not doing much so you can get rid of it.Eventually the combination of spironolactone and estradiol usually will suppress testosterone.

Eric And how long does it for the effects to begin, and to reach peak effect?

Jessica That, and that's really variable based on how quickly we ramp up on doses, also in order to achieve feminization, you need to suppress testosterone. Spironolactone of course is a diuretic that has a side effect of suppressing testosterone production, and I find that suppressing testosterone in some people can be very easy and quick and in others it can take quite a bit of medication dosage increase so the timeline is really variable.

Eric When would you see a patient, how long after the first visit, and then how do you decide about uptitrating doses?

Jessica I'll generally see a patient back after four weeks, and at that point I will check in and see how they're doing, if they're having any side effects, if they've noticed any physical changes, and I will check a basic labs such as renal function and electrolytes, and often I will check a testosterone at that visit, just to get an idea of where we are, and then usually if they're doing well, and the labs are normal, and they feel ready, at that point I'll increase their doses, and typically then I would increase to 2 mg of estradiol BID, and spironolactone dose I would often at that point increase to 150mg divided in a day, assuming their renal function and potassium are still within normal limits.

Eric And so I imagine if someone had hyperkalemia you would go down on the spironolactone or stop it. (Yes) Are there any other red flags that you tend to see that cause problems, or that tend to lead to a bumpy course?

Jessica So spironolactone I find, can have, it can have issues with orthostatic hypotension and dizziness. So you know I will ask patients about that when I see patients in followup, but I find that can really limit how high you can push that dose. So the dose needed to suppress testosterone is typically around 200 to 300 mg a day, and I find that a lot of people can't tolerate that, because of dizziness and orthostatic hypotension. Also of course, if you see an increase in creatinine, you're gonna want to back down on the spironolactone.

Eric And are there any other endocrine labs that you monitor as well?

Jessica And then after they have been on feminizing hormone regimen for several months then I will eventually monitor estradiol levels, but not early on, because they're not on enough. I will monitor estradiol levels once I think they're on therapeutic doses, just to make sure they are in a normal female range. So once they have been on hormones for several months and I think they are at their optimized dose, I will often check an estradiol level jsut to make sure they are therapeutic. So I find that with the patches, although they are the safest option, you can fail to come close to the desired range, and then that method is not going to work. So I like to make sure we are achieving a normal female estradiol level, which that range is very wide, so that range is 80 to 250, and I will pick my target in part based on someone's age and risk factors, so if its a young healthy person with few risk factors, I'll often shoot for the higher end of that range, if someone is older or has more risk factors, I will be more conservative.
The estradiol level is also a moving target. It will vary greatly throughout the day based on the timing of your dose, so if you're checking a level on someone who's using patches, you can check it at any point in time. If you're checkign a level in a patient who's on estradiol tablets, I'll try and check it bascially midway between their doses. If they're on injections, I'll generally check either a trough or a midweek estradiol level. Typically at the 1 year mark you would check a prolactin level.

Eric In summary, for feminizing hormone therapy, start with estradiol 2mg sublingual tablets, and spironolactone 50mg PO daily. Uptitrate the spironolactone in a week or two if there isn't hyperkalemia, kidney injury, or othostatic hypotension. See the patient back in a month and uptitrate the estradiol and spironolactone if things are continuing to go well. A few months in is a good time to check estradiol levels to confirm that you've achieved a level in the normal female range which is 80-250. The testosterone level should also be suppressed below 50.

Eric Ok and now moving on to the second half of our podcast, talking about trans-masculine patients, what kind of changes can people be told to expect with masculinizing hormone therapy?

Jessica Sure, so typically I will warn people that over time, they will lose their hair, so they can experience alopecia, they will have a permanent deepening of voice, and that's really variable, they will have facial hair, oftentimes they can experience acne, they will notice an increase in muscle mass, enlargement of the clitoris, cessation of menses, shift in body fat away from their hips and thighs and more into their midline, and increase in body hair.

Eric I notice that there's kind of a head to toe approach to how

Jessica Yeah it helps me remember. I go over this with patients and I can make sure I don't miss anything that way.

Eric Mm-hmm. So there are a fair number of perhaps unwanted effects, that people have to deal with.

Jessica Um certainly, I think, one thing that I will tell people ,especially trans-masculine patients, is you can't really pick and choose effects, so you may want a beard but uh you may go bald. And you can't pick and choose which one you're going to get. You'll have a deep voice but you may also have acne, so we talk a lot about you know the effects and you can't pick and choose which ones you want.

Eric Mm-hmm. And same thing, it takes a couple of months for these things to happen but it varies from patient to patient?

Jessica Yeah it's really variable, based on how quickly we're tapering up their dose, and how quickly we taper up depends on how they're doing, if they have comorbidities, and what their social support is like, we may go more slowly, if they have bipolar disorder, and limited social support. We may go more quickly in someone who doesn't have comorbidities and has a solid support system.

Eric And what are the relative or absolute medical contraindications to masculinizing treatment?

Jessica So same thing, hormone responsive cancer, active malignancy, breast cancer, ovarian cancer, uterine cancer.

Eric So you've gone through some of the most common side effects that are seen with masculinzing hormone therapy but are there other toxicites that are possible that you discuss with your patients?

Jessica Yeah so I warn people that testosterone can cause polycythemia, it can certainly cause weight gain, adverse lipid effects, elevation in transamonases, it can cause changes in mood, irritability, reactivity, testosterone can increase libido which can lead to higher risk sexual behavior in some people, it will stop periods, can cause amenorrhea, but at the same time can cause atrophic vaginitis, and sometimes some spotting or bleeding or discomfort associated with atrophic vaginitis. Testosterone also can cause permanent infertility in some people; at the same time, we know that testosterone is not adequate birth control if someone is sexually active with a male-bodied partner.

Eric And so after you've obtained informed consent, how do you go about starting a patient on masculinizing hormone therapy?

Jessica So it'd be the same process, I would do a psychosocial assessment, I would do a baseline physical which typically would not include a pap or breast exam bascially because some patients have discomfort with those types of exams and so I tend to wait until I get to know them better, until they become more comfortable, before I suggest that. Of course I do try and engage all of my trans patients in appropriate preventive screening, but sometimes you really need to build a relationship and a sense of trust before you're able to do that. So I will do a basic physical and obtain basic, baseline labs such as a comprehensive panel, a lipid panel, and a CBC, and then I will have the patient undergo injection teaching since usually they are starting injectable testosterone,

Eric And what does the injection teaching involve?

Jessica How I prescribe testosterone is a deep subcutaneous approach. So testosterone is not FDA approved for transgender people at all. So gender affirming hormones are not actually FDA-approved, they're used off-label, by nature, and then testosterone is FDA approved as an intramuscular injection, however many of the clinics that have been seeing trans patients for many years, such as Fenway, have not seen any difference with the use of a deep subQ injection, which is a lot more tolerable for the patient, so that is how I've been teaching patients who do their own injections. So I will bascially show them their injection supplies and teach them sterile technique, how to handle their supplies, how to draw up their testosterone, how to give themselves an injection, and then what to watch for in terms of infection or side effects.

Eric And can you tell me how you would titrate a dose, I guess we didn't talk about a starting dose?

Jessica So with testosterone I would typically, in someone without significant comorbidities that has a reasonable support system, I will start them on 200mg per mL of testosterone cypionate, and I will usually start at 0.2mL weekly, and taper up based on how they're doing, so I'll usually see them back in about 4-6 weeks, and if all is well and no significant mood instability and they feel ready, then I would increase to 0.3mL weekly and then have them come back in about 4-6 weeks, and again at that point if they're doing well, I would generally bump them up to 0.4mL weekly, and I find that at 0.4mL weekly, or 80mg weekly, that is an appropriate dose for most people to have a testosterone level in the normal male range. So typically on that dose I would check a trough testosterone level, and if it's in the normal male range, that's where I will leave them. If it's

not in that range or if they are still having periods, then I will bump up the dose to 0.5mL weekly, but that's generally where you stop.

Eric OK and most of us don't have the normal ranges memorized, I don't know if you have it memorized or you have it handy on a chart near your computer?

Jessica I see a lot of transgender patients so its typically 400-800, and since I'm checking a trough testosterone level, I'm looking for a trough to be around 400, in that range. If it's lower than that, then I will typically increase their dose. I also am not looking for a trough thats 600, 700, 800, that's a little excessive. So I would reduce their dose if their trough level was at the higher end of the normal male range.

Eric Ok so to summarize hormone therapy for trans-masculine patients, after doing a psychosocial assessment and getting informed consent, and doing injection teachign, the patient will be giving themselves weekly injections of testosterone, starting around 40mg once weekly, and titrating up every month or so until they are at 80mg, targeting a testosterone level around 400 nanograms per deciliter. The max dose is usually considered to be about 100mg of testosterone.
Now that we've discussed hormone therapy for trans patients, let's turn our attention to our final topic, the role of surgery.

Jessica Yeah so, many patients don't have any surgical procedures at all, because they don't want them, or because they can't afford them. Some transfeminine patients have had facial feminization, trans-feminine patients sometimes will have breast augmentation, and then also they will have orchiectomy or genital reconstructive surgery, or genital reassignment surgery. Transmasculine patients sometimes will have top surgery or removal of breast tissue with chest . There's an option for metoidioplasty, which is basically a clitoral release, and then there's also an option for phalloplasty, and I think um the majority of trans-masculine patients do not pursue bottom surgery, because it's very expensive, and the technique is still evolving.

Eric And what kind of assessment is needed before surgery in terms of psychological assessment, if any?

Jessica So typically for top surgery, so for male chest reconstruction or breast augmentation, I will say the WPATH guidelines allow for informed consent without any psychological evaluation. It's recommended that someone be on hormones for a year before pursuing top surgery.
For bottom surgery, or vaginoplasty, or phalloplasty, typically a patient will need to have a letter from a psychotherapist and will need to have been on hormones for a year. And then most insurance palns require a patient to have two letters from two different mental health providers, including a PhD-level psychologist.

Eric I imagine that is a big barrier for some people.

Jessica It's a big barrier, but the wait list right now for vaginoplasty in the United States is usually a couple of years. So that's really where the bottle-neck lays.

Eric OK. That about wraps up our discussion. Are there any other words of wisdom that you have, that you want to share with our listeners?

Jessica I think trans care, as I mentioned, is within the scope of primary care, I think that it's very rewarding, it's fun, you get to see someone go on this pretty incredible journey and be a part of it, so I also think that there are also great resources out there now to help providers provide trans care, basic hormone care, the Fenway guidelines for transgender care is probably the best that I've seen, it's very thorough and readable, UCSF Center for Transgender Excellence has great protocols online so I think it's very do-able for primary care providers.

Eric Great! Thank you so much for joining me on this podcast

Jessica Thank you for having me.

Eric Alright folks, thanks for listening. that's it for this episode. I'd love to hear from you, to find out who's listening to the podcast, and to get feedback. You can write to me at eric@oslercast.com, or post a star rating or review on Itunes, or you post questions or comments on the website, I'd love to get more discussion going on there. Until next time, take care.