Virginia Mason™

LGBTQ Health Issues

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Disclosures

There are no relevant financial relationships with commercial interests to disclose

Will discuss non FDA approved use of hormones

Transgender medicine is based mainly on expert opinion, and practices vary.

Resources

- USCF Guidelines
  - http://transhealth.ucsf.edu/protocols
  - Comprehensive user-friendly reference text
- Ingersoll Gender Center
  - https://ingersollgendercenter.org/
  - Join the listserve!
- Fenway Health
  - http://fenwayhealth.org/care/medical/transgender-health/
  - Great informed consent and injection teaching documents
- Cardea Online Training Module
  - User friendly online module for getting started with trans care
  - http://www.cardeaservices.org/resourcecenter/clinical-care-for-transgender-and-gender-nonconforming-patients
- Cedar Rivers Trans Toolkit
  - Includes resources for training staff
  - http://www.cedarriverclinics.org/transtoolkit/
- World Professional Assoc of Trans health
  https://www.wpath.org/

Objectives

- Be able to use language to express gender identity and preference
- Be able to identify health issues for patients who identify as LGBTQ
- Be able to start a trans patient on appropriate hormones
- Be able to monitor patients on hormone therapy
  - Will not be discussing surgeries
  - Will not be discussing adolescent or pediatric care

Definitions: Gender identity

- Gender Identity: how one perceives their gender
- Gender dysphoria(transgender): incongruence between experienced gender and gender at birth
- Transmale: female at birth identifies as male
- Transfemale: male at birth identifies as female
- Nonbinary: identifies as neither male or female
- Cisgender: identifies with birth sex
- Cross dresser: wears clothing of opposite sex

Definitions: sexual preference

- Sexual preference: preferred sex of partner
- MSM: men who have sex with men (“gay”)
- Bisexual: has sex with male and female bodied
- Lesbian: women who have sex with women
- Queer/questioning: gender or sexual preference falls outside of heterosexual “norm”

Why is this topic important

- 3.8% of US population ID as LGBTQ
- Estimated 1.4 million transgender adults in US
- In a 2015 survey, 39% of transgender people reported current serious psychosocial distress
- 50% have some mental health concerns(compared to 6.7% depression/18% anxiety in general population)
- 41% have attempted suicide (vs 4.6% of gen pop)
- Substance use risk could be higher
- Much is response to discrimination, stigma, lack of acceptance and abuse

- Sources: James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). Executive Summary of the Report of the 2015 U.S. Transgender Survey. Washington, DC: National Center for Transgender Equality.
- JAMA Intern Med 2018; 178;1535-42

Health concerns

Gay and bisexual men have higher CVD

Transwomen higher risk of VTE and CVD

Inappropriate cancer screening

Risks for STD and HIV acquisition

Barriers to care for LGBTQ

Lack of clinician knowledge

< 5 hrs of LGTBQ teaching in med school

Bias

Stigma

Time factors

Judgement

Assumptions

Patient fear of disclosure: distrust

Caveats to Gender history

Always be respectful

Always Be Non-judgmental

Make no assumptions (i.e. labeling)

Use Ask..Listen approach

Verbal and non-verbal communication should be professional

Better if patient is clothed and alone in room

Ensure record is confidential

Setting up the visit

Clinician and staff education on LGBTQ

Introduce yourself

Ask patient their preferred name and pronoun: make sure this is noted in the EHR

Patient should be clothed (especially if first time visit)

Be open to discussing gender identity and/or sexual preference

Getting started

- Review medical, surgical, family, sexual history
- “Tell me about your gender journey?”
  - How would you describe your gender?
  - How long have you not identified with the gender assigned at birth?
  - What are you goals? Do you have discomfort with any aspects of your body?
  - Who is your support system?
  - Do you feel safe at work and at home?

Getting started

Sexual history

Do you currently have a sexual relationship?

Is your sexual partner male or female bodied or both?

Have you had any STD or are concerned about this?

What types of sex do you engage in? (ie oral, rectal, vaginal …

Health maintenance testing

Cancer screening should be according to the gender at birth

Transmale-if they still have cervix needs PAP screening per usual guidelines

Transmale-if still have breast tissue need mammogram

Transfemale- still have prostate mammogram screening

Colon cancer screening per guidelines

HIV and Hep C screening per guidelines

Case one

27 yo male comes for RPE . He admits to MSM risk behavior. He has one steady partner who is HIV+ on HAART and VL <40

admits they have an “open” relationship

He asks about this once a day pill to take to prevent HIV

What would be recommended

A. He is eligible for PrEP and it is recommended if HIV test is negative

B. He is eligible for PrEP if he does not have active Hepatitis B

C. PrEP is not recommended

D. PrEP is recommended only if he has rectal sex

Exposure Risks (average, per episode, involving HIV infected source patient)

Percutaneous (blood)[1]	0.3%
Mucocutaneous (blood)[2]	0.09%
Receptive anal intercourse[3]	1 - 2%
Insertive anal intercourse[4]	0.06%
Receptive vaginal intercourse[5]	0.1 – 0.2%
Insertive vaginal intercourse[6]	0.03 – 0.14%
Receptive oral (male)[7]	0.06%
Female-female orogenital[8]	4 case reports
IDU needle sharing[9]	0.67%
Vertical (no prophylaxis)[10]	24%

Pre-Exposure prophylaxis

*Partners PrEP: hetero-discordant couples,N=4700 75%-90% HIV reduction with good adherence

Baeten et al. NEJM 2012;367:399-410

*IPrEx: MSM, 44%-92% reduction of HIV, N=2500

Grant et al. NEJM 2010; 363:2587-2599

FemPrEP & VOICE: at risk women- no sign risk reduction-but poor adherence, n=1950

Van Domme L et al. NEJM 2012;367:411-22

Marrazzo J et al. NEJM 2015;372:509-518

TDF2: hetero-discordant, RRR 63%-78%, n=1200

Thigpen M et al. NEJM 2012:367:423-434

*Ipergay n=400, MSM intermittent Truvada, 86% lower HIV rates than placebo Molina JM et al. NEJM 2015;373:2237-2246

PrEP: Candidates

- Men who have sex with men (MSM)
- HIV-positive sexual partner (esp if other contacts, not viral suppressed
- Recent bacterial STI
- High number of sex partners
- Women/Men w/inconsistent or no condom use
- Commercial sex work
- IVDU
- Transgender with high risk behavior

Source: Center for Disease Control and Prevention

Before Initiating PrEP

Make sure pt is HIV NEGATIVE- 4th gen HIV Ag/Ab test and HIV viral load is acute HIV possible

Screen for Syphilis, GC, CT, cbc and cmr

If CrCl is <60 mL/min do not give PrEP

Screen for active Hep B (HBsAg, HBsAb)

Recommended PrEP regimen

Tenofovir disoproxil(TDF) + Emtricitabine(FTC)

- Trade name: Truvada

Tenofovir alafenamide (TAF) + FTC is not yet approved for use for PrEP

- Trade Name: Descovy

Source: US Public Health Service. Preexposure prophylaxis for the prevention of HIV infection in the United States—2014. A clinical practice guideline. 2014:1-67

Recommended Laboratory Testing and Frequency for Patients Taking PrEP

Laboratory test	Baseline	Every 3 months	At least every 6 months	Notes
HIV screening assay	✔	✔		Consider need for HIV RNA PCR
HBV antibody panel and HCV antibody	✔			Offer HBV vaccination if not immune
Serum creatinine	✔		✔	Avoid PrEP if eCrCl <60 mL/min
STI testing	✔		✔	Include oral/rectal screen for MSM if risk
Pregnancy test for women*	✔	✔		

Åbbreviations: eCrCl = estimated creatinine clearance; STI = sexually transmitted infections
*The safety of PrEP in pregnancy has not been established

Patient case: “Joy”

- Joy is a 36 year old AFAB (assigned female at birth) with depression and anxiety on venlafaxine 225mg daily, buspirone 15mg BID.
- She tried therapy but didn’t find it helpful.
- PHQ9 is 21, GAD7 is 19. She is having SI but contracts for safety.
- You decide to increase the buspirone.
- On your way out of the visit, she asks,

  “Do you prescribe testosterone?”

Transgender patients need our help.

- Hormone therapy has been shown to significantly improve depression, anxiety, psychosocial functioning, somatization, hostility, and phobias.

White Hughto and Reisner. A systematic review of the effects of hormone therapy on psychological functioning quality of life in transgender individuals. Transgend Health. 2016 Jan;1(1):21-31. Epub 2016 Jan 13.

Transgender people need better access to care.

- 78% desired hormone therapy but only 49% received it.
- 33% have had a least one negative experience with a health care clinician in the past year.
- 23% did not see a clinician when they needed to because of fear of being mistreated.
- 31% reported none of their clinicians knew they were transgender.

Source: James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). Executive Summary of the Report of the 2015 U.S. Transgender Survey. Washington, DC: National Center for Transgender Equality.

Patient Case: John (previously Joy)

- The patient's preferred name is John, and pronouns are he/him.
- He started having dysphoria with his body around puberty.
- He has been reading about transitioning on the internet for years and is very knowledgeable about testosterone. He still appreciates the informed consent discussion.
- He is thrilled to be starting testosterone and is so grateful to you for helping him.
- **What are the next steps?**

Is it OK to prescribe hormones?

By WPATH guidelines, you can offer hormones if the patient provides informed content and meets 2+ DSM gender dysphoria criteria for 6+ months:

- A marked incongruence between one's experienced/expressed gender and primary and/or secondary sex characteristics.
- A strong desire to be rid of one's primary and/or secondary sex characteristics because of a marked incongruence with one's experienced/expressed gender.
- A strong desire for the primary and/or secondary sex characteristics of the other gender.
- A strong desire to be of the other gender, transform into the other gender.
- A strong desire to be treated as the other gender by family, society.
- A strong conviction that one has the typical feelings and reactions of the other gender.

Next Steps

Initial labs:

CBC

CMR

Testosterone level (total)

Estradiol level

STD testing as appropriate

Prevention screening based on gender at birth (unless surgery done)

Consider consent for hormone therapy

Informed Consent

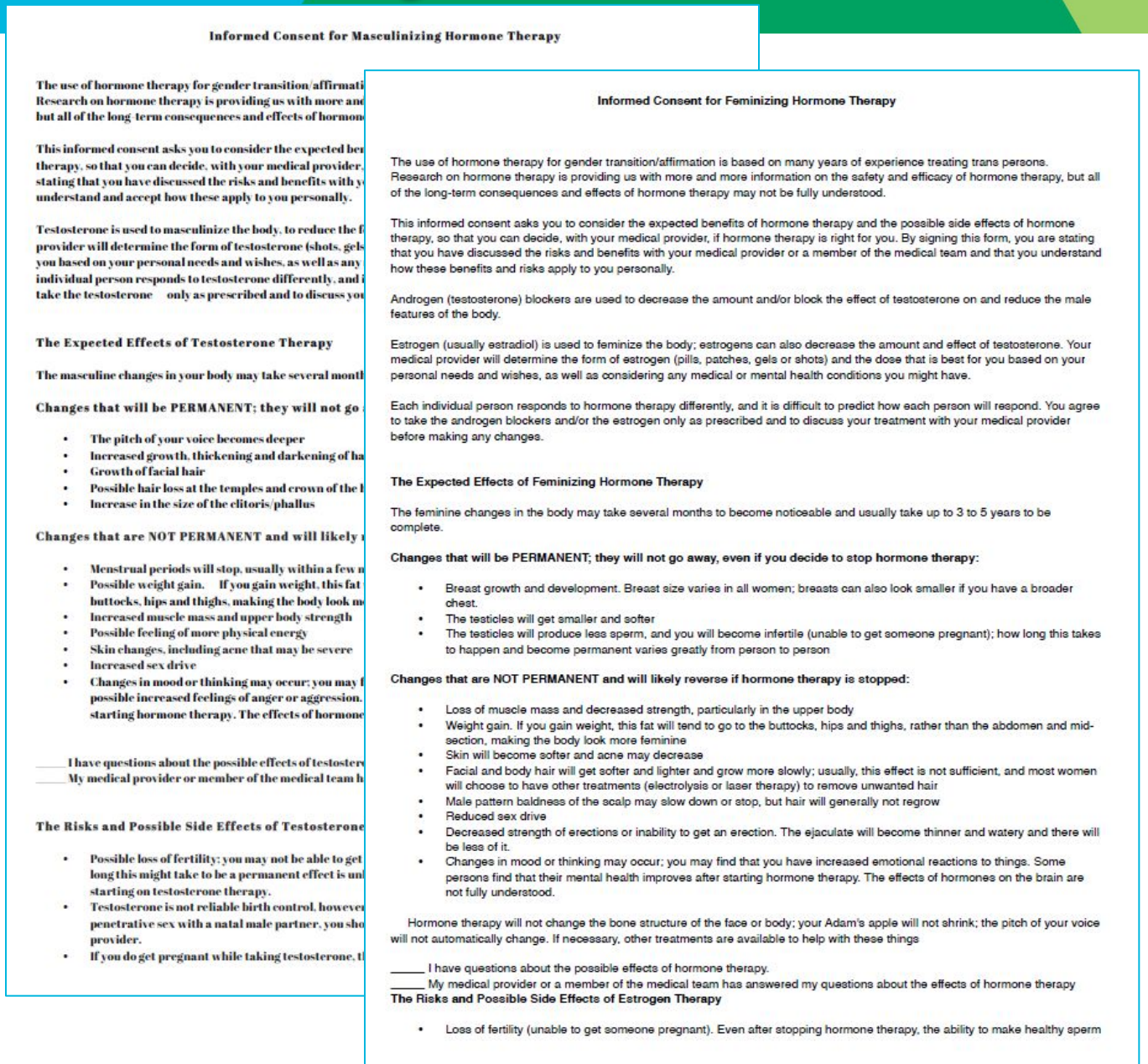
- The informed consent process means that you review all the risks of hormone treatment and the possible changes in the body with the patient.
- Understand some of the changes can be non-reversible
- If the patient desires these changes and accepts the risks, then you proceed with hormone therapy.

- There are informed consent documents on the Fenway Health website: http://fenwayhealth.org/care/medical/transgender-health/

Let's make this easy…

Google:

"Fenway transgender health"



Informed Consent for Masculinizing Hormone Therapy

The use of hormone therapy for gender transition/affirmati
Research on hormone therapy is providing us with more and
but all of the long-term consequences and effects of hormon

This informed consent asks you to consider the expected ber
therapy, so that you can decide, with your medical provider,
stating that you have discussed the risks and benefits with y
understand and accept how these apply to you personally.

Testosterone is used to masculinize the body, to reduce the f
provider will determine the form of testosterone (shots, gels
you based on your personal needs and wishes, as well as any
individual person responds to testosterone differently, and i
take the testosterone only as prescribed and to discuss you

The Expected Effects of Testosterone Therapy

The masculine changes in your body may take several month

Changes that will be PERMANENT; they will not go

- The pitch of your voice becomes deeper
- Increased growth, thickening and darkening of ha
- Growth of facial hair
- Possible hair loss at the temples and crown of the
- Increase in the size of the clitoris/phallus

Changes that are NOT PERMANENT and will likely

- Menstrual periods will stop, usually within a few
- Possible weight gain. If you gain weight, this fat
buttocks, hips and thighs, making the body look m
- Increased muscle mass and upper body strength
- Possible feeling of more physical energy
- Skin changes, including acne that may be severe
- Increased sex drive
- Changes in mood or thinking may occur; you may
possible increased feelings of anger or aggression.
starting hormone therapy. The effects of hormone

____ I have questions about the possible effects of testoster
____ My medical provider or member of the medical team h

The Risks and Possible Side Effects of Testosterone

- Possible loss of fertility; you may not be able to get
long this might take to be a permanent effect is un
starting on testosterone therapy.
- Testosterone is not reliable birth control, however
penetrative sex with a natal male partner, you sho
provider.
- If you do get pregnant while taking testosterone, t

Informed Consent for Feminizing Hormone Therapy

The use of hormone therapy for gender transition/affirmation is based on many years of experience treating trans persons. Research on hormone therapy is providing us with more and more information on the safety and efficacy of hormone therapy, but all of the long-term consequences and effects of hormone therapy may not be fully understood.

This informed consent asks you to consider the expected benefits of hormone therapy and the possible side effects of hormone therapy, so that you can decide, with your medical provider, if hormone therapy is right for you. By signing this form, you are stating that you have discussed the risks and benefits with your medical provider or a member of the medical team and that you understand how these benefits and risks apply to you personally.

Androgen (testosterone) blockers are used to decrease the amount and/or block the effect of testosterone on and reduce the male features of the body.

Estrogen (usually estradiol) is used to feminize the body; estrogens can also decrease the amount and effect of testosterone. Your medical provider will determine the form of estrogen (pills, patches, gels or shots) and the dose that is best for you based on your personal needs and wishes, as well as considering any medical or mental health conditions you might have.

Each individual person responds to hormone therapy differently, and it is difficult to predict how each person will respond. You agree to take the androgen blockers and/or the estrogen only as prescribed and to discuss your treatment with your medical provider before making any changes.

The Expected Effects of Feminizing Hormone Therapy

The feminine changes in the body may take several months to become noticeable and usually take up to 3 to 5 years to be complete.

Changes that will be PERMANENT; they will not go away, even if you decide to stop hormone therapy:

- Breast growth and development. Breast size varies in all women; breasts can also look smaller if you have a broader chest.
- The testicles will get smaller and softer
- The testicles will produce less sperm, and you will become infertile (unable to get someone pregnant); how long this takes to happen and become permanent varies greatly from person to person

Changes that are NOT PERMANENT and will likely reverse if hormone therapy is stopped:

- Loss of muscle mass and decreased strength, particularly in the upper body
- Weight gain. If you gain weight, this fat will tend to go to the buttocks, hips and thighs, rather than the abdomen and mid-section, making the body look more feminine
- Skin will become softer and acne may decrease
- Facial and body hair will get softer and lighter and grow more slowly; usually, this effect is not sufficient, and most women will choose to have other treatments (electrolysis or laser therapy) to remove unwanted hair
- Male pattern baldness of the scalp may slow down or stop, but hair will generally not regrow
- Reduced sex drive
- Decreased strength of erections or inability to get an erection. The ejaculate will become thinner and watery and there will be less of it.
- Changes in mood or thinking may occur; you may find that you have increased emotional reactions to things. Some persons find that their mental health improves after starting hormone therapy. The effects of hormones on the brain are not fully understood.

Hormone therapy will not change the bone structure of the face or body; your Adam's apple will not shrink; the pitch of your voice will not automatically change. If necessary, other treatments are available to help with these things

_____ I have questions about the possible effects of hormone therapy.
_____ My medical provider or a member of the medical team has answered my questions about the effects of hormone therapy

The Risks and Possible Side Effects of Estrogen Therapy

- Loss of fertility (unable to get someone pregnant). Even after stopping hormone therapy, the ability to make healthy sperm

Side Effects:Masculine Hormones

Timeline of effects in masculinizing hormone therapy
Sourced from the Endocrine Society Guidelines, 2017 & Keven Hatfield, MD

Effect	Onset in Months	Maximum in Years	Reversible?
Skin oiliness/acne	1-6	1-2	YES
Fat redistribution	3-6	2-5	YES
Cessation of menses	2-6	N/A	YES
Clitoral enlargement	3-6	1-2	NO
Libido Increase	1-3	1-2	YES
Vaginal atrophy/dryness	3-6	1-2	YES
Facial / body hair	3-6	3-5	NO
Androgenic hair loss	6-12	3-5	NO
Muscle mass Increase	6-12	2-5	YES
Deepening of voice	2-4	1-2	NO
Fertility Reduction	3-6	N/A	POSSIBLY

Masculinizing hormones

Source: USCF transgender

Medication	Initial dose	Maximum dose	Comments
Testosterone cypionate	25-50 mg q wk SQ	100 mg q wk SQ	Can also be q 2 wks IM
Testosterone enthanate	25-50 mg q wk SQ	100 mb q wk SQ	Can be q 2 wk IM
Testosterone gel 1%	12.5-25 mg q am	100 mg q am	May need PA
Testosterone gel 1.62%	20.25 mg q am	103 mg q am	May need PA
Testosterone patch	1-2 mg q pm	8 mg q pm	Can cut patches May need PA

If injection testosterone

- Provide paper script for testosterone cypionate 200mg/mL, 0.1mL SQ weekly.
- Send to pharmacy or get OTC:
  - 18G & 25G needles
  - 1mL Leur-Lok syringes
  - Alcohol prep pads
  - Sharps bin
- Schedule patient for injection teaching and have him bring the supplies with him.
  - Great YouTube videos by Kevin Hatfield
    - https://www.youtube.com/watch?v=XzWs5LAWqPc
    - https://www.youtube.com/watch?v=fkBuY4iMK7E
  - Fenway Health Website also has a guide

Testing follow up

- See pt 1 month after initiating and then q 3 months for first 2 years
- CBC and testosterone one month after initiating
- Repeat CBC, Liver functions, testosterone and estradiol levels q 3 months for 2 yrs
- Goal testosterone: 400-600 (but individualize)
- Testing then 6-12 months when stable afterward (may not need estradiol)
- Routine prevention testing (ie A1C, lipids)
- If cervix present- needs PAP per usual guidelines

Gender affirming surgeries

- A transgender patient may or may not want gender affirming surgeries. These could include:
  - Masculinizing
    - Chest reconstruction (“top surgery”)
    - Hysterectomy
    - Metoidioplasty or phalloplasty (“bottom surgery”, “SRS”)
  - Feminizing:
    - Breast augmentation
    - Vaginoplasty (“bottom surgery”, “SRS”)
    - Orchiectomy
    - Facial reconstruction, tracheal shave

Patient Case: Susan

- Susan is a 36 year old woman AMAB seeing you to establish care.

  Pronouns she/her.
- PMHx: Hypertension, Tobacco abuse
- She wants to start hormones and has had validation at prior physicians on her transgender
- Is she eligible for hormone therapy?
- Any concerns?

Case: Susan

- Yes if it is confirmed of her gender dysphoria and desire to be on hormone it is appropriate
- Concerns would be increased risk of DVT/PE given smoking- smoking cessation counseling is essential but not a contraindication to transgender hormone
- Unknown about risk for breast cancer but likely higher also
- Important to have blood pressure treated

Side Effects: Feminine Hormones

Timeline of effects in feminizing hormone therapy
Sourced from the Endocrine Society Guidelines, 2017 and Fenway Health

Effect	Onset in Months	Maximum in Years	Reversible?
Fat redistribution	3-6	2-5	YES
Decrease muscle mass	3-6	1-2	YES
Softening of skin	1-6	1-2	YES
Decreased libido	1-3	3-6	YES
Decreased erections	1-3	3-6	YES
Breast growth	3-6	2-3	NO
Decreased testicle size	3-6	2-3	NO
Decreased hair growth	6-12	>3	YES
Decreased fertility	Unknown	>3	MAYBE

Feminizing Hormones

Source: UCSF transgender

Medication	Initial dose	Maximum dose	Comments
Estradiol oral/SL	1mg q day	4 mg bid	Estradiol trough 200-500
Estradiol transdermal	50 mcg to skin	100-400mcg	Max patch is 100 mcg
Estradiol Valreate IM or SQ	10 mg IM/SQ q 2 wk	20-40 mg SQ/IM q 2 wk	Could dose for weekly (reduce by 50%) Trough estradiol: <200
Estradiol cypionate IM or SQ	1mg SQ/IM q 2 wks	5 mg SQ/IM q 2 wks	If dosing weekly use ½ dose Trough <200
Androgen Blockers	Initial dose	Max dose	
Spironolactone	25 mg daily	200 mg daily	Testosterone <50
Finasteride	1 mg daily	5 mg daily	

Monitoring

- Baseline labs: cbc, cmr, estradiol, testosterone levels
- Monitor q 3 months for 2 yrs then q 6-12 months when stable
- Some guidelines say to monitor Sex Hormone Binding Globulin and albumin (guidelines differ)
- Prolactin- only if symptomatic
- Routine screening based on gender at birth

Preventative Care

- Transgender people need care according to what body parts they have.
- The approach is the same as for cis gender people with a few tweaks:
    - Breast cancer screening only if on hormones for at least 5-10 years.
    - Cervical cancer screening can be painful physically and psychologically for trans men.
        - Consider pretreating with vaginal estradiol, especially if pap is abnormal. Can also use topical lidocaine.
        - Let the pathologist know that the patient on testosterone.
    - For calculating cardiovascular risk, make a judgement call or take an average.

Insufficient data

- Overall risk of VTE/PE with estrogen
- Overall risk of OSA/cardiac issues with testosterone
- What to do with hormones if serious adverse effect

Summary

- Non-judgemental care is essential
- Need clinician education to improve LGBTQ care
- PrEP in at risk patients
- Transgender patients need similar preventative care as cis patients
- Hormone therapy can improve health

Resources

- USCF Guidelines
  - http://transhealth.ucsf.edu/protocols
  - Comprehensive user-friendly reference text
- Ingersoll Gender Center
  - https://ingersollgendercenter.org/
  - Join the listserve!
- Fenway Health
  - http://fenwayhealth.org/care/medical/transgender-health/
  - Great informed consent and injection teaching documents
- Cardea Online Training Module
  - User friendly online module for getting started with trans care
  - http://www.cardeaservices.org/resourcecenter/clinical-care-for-transgender-and-gender-nonconforming-patients
- Cedar Rivers Trans Toolkit
  - Includes resources for training staff
  - http://www.cedarriverclinics.org/transtoolkit/
- World Professional Assoc of Trans health
  https://www.wpath.org/

References

Deutsch MB, Feldman JL. Updated recommendations from the world professional association for transgender health standards of care. Am Fam Physician. 2013 Jan 15;87(2):89-93.

James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). Executive Summary of the Report of the 2015 U.S. Transgender Survey. Washington, DC: National Center for Transgender Equality.

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Rosendale N et al. Acute clinical care for transgender patients. Jama Intern Med 2018; 178:1535-42.