Finding health in gender-affirming care

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Disclosures

• None
Learning Objectives

• Learners will be able to define terms related to gender incongruity
• Learners will be able to navigate a conversation about gender incongruity and transgender care
• Learners will understand the fundamentals of medical care for gender affirmation
• I will not be discussing treatment of children
• I will also not go in-depth on surgical treatment

Mr R.

MR R is a 28yo female sex assigned at birth presenting to the office following an ER visit for a suicide attempt—having ingested unknown quantities of unknown medications and alcohol. Upon further questioning he identifies some of the root causes of his depression is that he has identified as being transgendered for years and has sought gender affirming hormone therapy but felt unwelcome by other medical providers.
Mr R.

- Turning a new leaf (turning point)
- Patient-centered care
- Shared decision-making
- Setting expectations

Red Flags

- History of Eating Disorder
- History of Depression
- History of Substance Abuse
- History of Self-Harm
- History of Suicidal Intent/Attempt
It’s about trust

• By the time a patient has seen you they have probably seen 2-3 other medical providers

Gender orientation ≠ sexual preference

“Part of my role in making sure you are healthy and happy is understanding your risks as it relates to sex. Tell me about what sex is like? Is it with men or women or both? Do you use your vagina? Penis? Do you share toys? Drugs? Money?”
Gender non-binary or genderqueer

What we know

• 0.6% (or 1.4 million) persons are transgender
• There is a biologic basis
  • Inability to manipulate gender identity by external means
  • Male gender identity in CAH exposed to androgen in utero
  • Twin studies
• Transgender persons have higher rates of anxiety, depression, and suicidality
Female Gender Affirming HRT

Transfeminine care

Expectations

• Goals for most patients: reduce facial hair growth, breast development, fat and muscle redistribution to more feminine
  • Many will still need electrolysis of hair due to previous androgen exposure
• Will NOT change skeletal structure or voice
  • already altered by androgen exposure during puberty
• Possible reduction in sexual libido after starting HRT
• After approx 6–18 months: breast growth, decreased muscle mass, softer skin, fewer erections.
Behavioral Health

• Transgender persons have higher rates of anxiety, depression, and suicidality
• Although the Endocrine Society guidelines (3) state a preference for involvement of mental health providers in transgender determination for adults, they acknowledge that any sufficiently knowledgeable provider can make this determination.

Lab monitoring

• Labs every 3 mo for the first year (until at goal levels) then 1-2 times yearly or with dose changes
• Goal estradiol <200pg/mL
• Goal testosterone <50ng/dL
• Careful attention to if the lab is reporting M or F. Patient could still be registered with the lab as M.
• Note: it is physiologically possible to do this with estradiol (without spironolactone for androgen inhibition), however it significantly increases thrombosis
Medications

• 17-beta estradiol, which is a "bioidentical" hormone in that it is chemically identical to that from a human ovary.
• Androgen suppression: spironolactone, cyproterone acetate (a progestin that is especially popular in Europe), and gonadotropin-releasing hormone (GnRH) agonist therapy.
• A prospective study of transgender women taking 4mg/day divided dose oral estradiol or 100mcg transdermal estradiol, plus 100-200mg/day divided dose spironolactone found that all women achieved physiologic estradiol levels, though only 2/3 of the women achieved female range testosterone levels.(4)

Medications

• Orchietomy is the most effective means of decreasing testosterone levels, but many transgender women choose medical treatment only, particularly early in their presentation
• Other considerations: progesterones not recommended due to excess cardiovascular and breast cancer risk in older postmenopausal women receiving conjugated estrogens (5).
• Could consider finasteride. Inhibits 5alpha2 reductase. Reduces testosterone effect on prostate and hair follicle. Could use in transgender women with male pattern baldness.
• Bicalutamide, a direct anti-androgen used for the treatment of prostate cancer, also has a small but not fully quantified risk of liver function abnormalities (including several cases of fulminant hepatitis); while such risks are acceptable when considering the benefits of bicalutamide in the management of prostate cancer, such risks are less justified in the context of gender affirming treatment. No evidence at present exists to inform such an analysis.
Contraindications

• Consider the relative contraindications for estrogen therapy, such as history of breast cancer, venous thromboembolic disease, cardiovascular disease, or cerebrovascular disease.
• Hyperprolactinemia should be addressed before estradiol therapy is started to avoid confusion, although data do not show that the common estrogen–spironolactone regimen stimulates increased prolactin production outside the normal range.

Thrombosis risk

• Evidence shows that the excess risk for thrombosis can be mitigated by using lower doses of oral estrogen or by using transdermal or injectable estrogen products, thus avoiding the drug's initial metabolism by the liver. The Endocrine Society guidelines recommend against use of ethinyl estradiol because data suggest that it is especially thrombogenic (6)
Fertility

• Before hormone treatment or surgery
  • Sperm cryopreservation
  • Can be cost prohibitive

Menopause?

• Since the mean age of menopause in the U.S. is 49, it is reasonable in transgender women who have undergone gonadectomy to consider stopping hormone therapy around age 50. Expected effects of this may be similar to non-transgender women experiencing menopause. Transgender women who retain their gonads but withdraw hormone therapy may experience return of virilization. A discussion of the pros and cons of this approach, with individualized and shared decision making is recommended.
PrEP and STI risk

• Talk about sex
• MTF transgender persons have the highest proportional risk of HIV acquisition
• Extensive counseling and discussion of PrEP as part of a multifaceted HIV prevention
• Same with other STI's – I advise patients that I initially screen everyone for STI’s from the beginning and do not screen based on the calendar—"if you’re having sex with different folks, you need to be screened and we’re going to swab whatever you’re using for sex”

Male Gender Affirming HRT

Transmasculine care
Expectations

• After approx. 3–6 months of treatment: cessation of menses, deepening voice, increased muscle mass, increased acne, and increased sexual desire.

• Other changes may become apparent over longer periods, such as male hair pattern (including balding depending on age and family genetic background) and clitoral enlargement.

• Height is not affected by hormone treatment administered after puberty.

Behavioral Health

• Transgender persons have higher rates of anxiety, depression, and suicidality

• Again emphasizing the importance of behavioral health consultation though recommended by guidelines, not necessary
Lab monitoring and medications

• Testosterone goal 300-1000ng/dL
• Any preparation. Injectable can be SC or IM based on patient comfort.
• Long-acting testosterone (testosterone undecanoate) is available but is associated with pulmonary oil microembolism and anaphylaxis. Thus, certification via a Risk Evaluation and Mitigation Strategy is required to administer this drug in the United States.
• Checking levels. Can do peak (24-48hr after dose) and trough (before next dose) or midway between doses.
• Consider Q3mo CBC, CMP, lipids while titrating, then yearly

Preventive Care/Screenings

• CANCER SCREENING: In the absence of transgender-specific data, routine cancer screening should be done on the basis of the tissues and organs present and guidelines for the general population.
• One guideline suggests that practitioners consider hysterectomy for transmasculine patients to avoid cancer risk from endometrial exposure to androgen, there are no data documenting this risk.(3)
Questions?

References

• 1. UCSF guidelines - https://transcare.ucsf.edu/guidelines
• 4. WPATH guidelines - https://www.wpath.org/publications/soc