



**Mount
Sinai**

*Center for Transgender
Medicine and Surgery*

Gender Affirming Hormone Treatment – Key Things to Know

1.

The strategy is primarily to manipulate testosterone levels (trans masculine and trans feminine) – estrogen levels (at least to the degree that estradiol measured is a reasonable proxy) do not differ much.

2.

For trans masculine treatment, give testosterone to achieve male range levels.

3.

For trans feminine treatment, lower testosterone to achieve female range levels.

4.

For trans feminine treatment, maintain some sex steroid for bone health (exact levels not known). Use adjunctive approaches to minimize estrogen treatment doses because thrombosis risk seems dose-related (indeed, is transdermal administration simply a strategy with lower systemic levels or is there a benefit to avoiding first-pass through the liver?). Ditto re bone for trans masculine treatment.

5.

Further, recognize the relative VTE risks among exogenous estrogens. Recognize that ethinyl estradiol (prescribed casually to cis women in their potential child bearing years) is more thrombogenic than 17-beta-estradiol – the implications include both 1. avoiding ethinyl estradiol and 2. recognizing how small the VTE risk for 17-beta-estradiol might be.

6.

For gender affirming hormone treatment, note the additional medication specific monitoring (K for spironolactone, hct for androgens – stim of erythrocytosis may unmask polycythemia path).

7.

Note the presumed pros/cons of adjunctive trans feminine treatments.

Spironolactone is safe but for K concerns and that it is apparently only modest in T lowering.

Progestins (including cyproterone?) lower T well but are associated with CAD, breast CA, increased thrombogenicity at least in the longer term and in cross-sectional studies. There are anecdotal reports of increased areola development with progestins but it is unclear if that is even a good thing.

8.

For trans feminine treatment strategy, be aware of androgen impact on physical features – what is more reversible/what is less so.

9.

Be aware of key elements in primary care (e.g. breast tissue surveillance needed but no data re approach, prostate is present even in trans women s/p vaginoplasty, most trans masculine individuals retain their uterus/ovaries and need cervix surveillance).

10.

Note areas of concern listed in many guides due to fears that could make sense based on physiology but that do not have supporting data (and may or may not be genuine concerns). Examples include need for prolactin monitoring and VTE fear).

11.

Have some comfort with issues that are currently on social media but where data are thin and social media might be wrong (specifically, use of progestins, logic of 5 alpha reductase inhibitors, injectable estrogens, and patients avoiding spironolactone).

12.

Be aware of the pitfalls of the mental health framing of gender affirming care. Examples include forcing patients to discuss customized gender affirming care as relieving dysphoria of some sort that they may not be suffering. Or creating a false expectation that a gender affirming medical intervention will address mental health concerns like anxiety and depression that will actually require approaches independent of the gender affirming care.