Klinic COMMUNITY HEALTH

ESTROGEN AND TESTOSTERONE BLOCKER THERAPY GUIDELINES

Generally, provision of cross sex hormones is an informed consent process for individuals Gender Dysphoria diagnosis. What is required is a discussion of expected physical changes to expect with estrogen and anti-androgen therapy, highlighting non-reversible changes (breast growth, testicular atrophy), as well as review of risks (medical and fertility risks).

Referral for Fertility preservation should be discussed and offered prior to initiation of therapy (Heartland Fertility clinic does prioritize referrals for trans individuals). Please refer to the estrogen and anti-androgen consent form that is on the Klinic website (section on Transgender Health- for providers).

The World Professional Association for Transgender Health (WPATH) criteria for initiation of cross sex hormones:

1.Persistent well-documented gender dysphoria

2.Capacity to make a fully informed decision and to consent for treatment

3.Age of majority or mature minor

4.If significant medical or mental health concerns are present, they must be reasonably well-controlled

The following is a summary of current guidelines for hormone therapy and preventative care. Feminizing hormone therapy generally include an antiandrogen medication (spironolactone OR cyproterone acetate) together with estradiol. For young, health individuals under age 40, we generally start with oral estradiol at the dose outlined below, although transdermal is also an option.

Medications	Starting Dose	Maximum Dose
ANTI-ANDROGENS		
Spironolactone	50 mg OD-BID	150 mg po BID
Cyproterone acetate	12.5-25 mg OD	50 mg po OD
ESTROGENS		
Estradiol (oral)	1-2 mg OD	6 mg OD or 3 mg BID
Estradiol patch (transdermal)	50 mcg daily (change 2x a week)	200 mcg daily (change 2x a week)
Estradiol gel (transdermal)	2.5 g (2 pumps) daily	6.25 g (5 pumps) daily

Estradiol valerate (IM) ***not covered*** CinDen Pharmacy on Scurfield Blvd	3-4 mg IM weekly OR 6-8 mg IM q2weeks	10 mg IM weekly

Bloodwork

- Baseline: CBC, AST/ALT, Creatinine/electrolytes, HgbAIC (or fasting glucose), Lipid profile, total testosterone, estradiol and prolactin.
- Every 3 months during first year of therapy: -total testosterone and estradiol (with medication titration to target hormone levels listed below).

  - CBC, AST/ALT every 3 months for those on cyproterone as a blocker
  - creatinine, potassium every 3 months for those on spironolactone as a blocker (and 2 weeks after dose changes)

- Annually after the initial 12 months of hormone treatment

  - Serum estradiol, serum testosterone, ALT
  - CBC: if taking cyproterone, or at provider discretion. Use female reference range for LLN of Hgb/Hct.
  - Serum potassium, creatinine (with spironolactone)
  - Prolactin: if taking cyproterone or if previously elevated. Consider MR sella turcica if persistently elevated > 80 nmol/L or symptoms of a prolactinoma arise.

- A1C/FPG and lipid screening

  - Test according to guidelines for cis patients or at provider discretion.
  - For CV risk calculation (eg. Framingham), use either birth sex or affirmed gender, or an average of both

Hormone Targets

- Total testosterone < 2.4 nmol/L
- Estradiol

  - Pre-menopausal range (< 60-65 yo): 200 - 740 pmol/L. Most patients achieve adequate feminization with serum levels between 200-500 pmol/L.
  - Post-menopausal range (> 60-65 yo): <200 pmol/L. Usually this will be achieved with doses typically administered to post-menopausal cis women, eg. starting/low-dose topical formulations.

Prevention

- STIs: Offer screening as appropriate, with frequency depending on risk.
- Breast: Offer screening according to Manitoba BreastCheck Guidelines for cis women (i.e. starting at age 50 for those at average risk). Breast cancer risk in trans women on feminizing therapy is likely intermediate between cis men and cis women.
- Prostate
    - As with cis men, routine PSA or DRE screening is not recommended in the absence of clinical risk factors or symptoms
    - Be aware that feminizing therapy will decrease PSA values, even in the presence of prostate cancer
    - After vaginoplasty, the prostate can be examined through the anterior vaginal wall
- Bone Density
    - Encourage weight-bearing exercise and adequate intake of calcium and vitamin D.
    - Offer BMD screening at age 65, or earlier if other risk factors arise (especially if your patient has undergone orchiectomy and has not been on hormone therapy for > 2 years)
- HPV
    - Offer HPV vaccination if indicated (Manitoba Health covers trans clients age 9-26)

Resources

- Primary Care (2019): http://www.rainbowhealthontario.ca/guidelines/
- Klinic Community Health Transgender Health Resources for Providers: http://klinic.mb.ca/health-care/transgender-health-klinic/health-care-providers/
- World Professional Association for Transgender Health, Standards of Care: http://www.wpath.org/publications/soc

If you have any further questions, please don't hesitate to contact Trans Health Klinic by phone at (204) 784-4083 (Nurse Coordinator Line), or by fax or eConsult.