Klinic COMMUNITY HEALTH

TESTOSTRONE 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 testosterone therapy, highlighting non-reversible (voice deepening, body and facial hair growth, clitoral enlargement and potential for androgenic hair loss), as well as review of risks, including 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 testosterone consent form available 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. For most, injectable testosterone is initiated at dose of 50 mg every 2 weeks (IM or subcut injections).

Medications	Starting Dose	Maximum Dose
<u>INJECTABLE</u>		
Testosterone cypionate	20-50 mg weekly OR	100 mg weekly OR
(10 mL vials, 100 mg/mL)	40-100 mg q2 weeks	200 mg every 2 weeks
Testosterone enanthate	20-50 mg weekly OR	100 mg IM weekly
(5 mL vials, 200 mg/mL)	40-100 mg q2 weeks	200 mg IM q2weeks
<u>TRANSDERMAL</u> ***not covered***		
Transdermal gel 1% (Androgel)	2.5 - 5 g (2-4 pumps) daily	10 g (8 pumps) daily
Transdermal patch	2.5-5 mg daily	10 mg daily

Transdermal patch (Androderm)	2.5-5 mg daily	10 mg daily

Bloodwork

- Baseline: CBC, AST/ALT, HgbAIC (or fasting glucose), Total testosterone, lipid profile
- First year of therapy
  - CBC, total testosterone every 3 months
  - Injecting every week: bloodwork should be drawn 3-4 days after injection
  - Injecting every 2 weeks: bloodwork should be drawn 7 days after injection
  - ALT/AST, A1C, and lipid profile: 6-12 months post testosterone start
- Annually (12 months of hormone therapy)
  - CBC for Hgb/Hct (see below)
  - Serum testosterone (for IM/SC, measure at midpoint between injections or trough)
  - ALT: optionally at provider discretion, particularly if risk factors are present
  - A1C/FPG and lipid screening
    - Test according to guidelines for cis patients or at provider discretion.
    - For CV risk calculation (eg. Framingham), use birth sex or affirmed gender, or an average of both.

Hormone Targets

- Testosterone (ideally drawn at mid-point between testosterone injections): 9.7-38.1 nmol/L; ideally 9.7-25 nmol/L to minimize CV risk.
- Hgb and Hct:
  - Hgb <180 g/L or Hct <0.54
  - If elevated, decrease testosterone dose if possible and monitor for recurrence of menses or increased gender dysphoria.
  - If persistent and/or unable to decrease testosterone, start ASA 81 mg po daily and consider hematology referral and/or periodic phlebotomy.

Prevention

- Contraception
  - Due to the teratogenic effects of testosterone, clients using testosterone prior to hysterectomy who are at risk of pregnancy should use contraception (eg. condoms, IUD, Depo-Provera) and discontinue testosterone immediately if they become pregnant.
- Chest (pre-mastectomy)
  - Offer screening according to Manitoba BreastCheck Guidelines for cis women (i.e. starting at age 50 for those at average risk).

- Cervix
  - Clients with a cervix should be offered Pap testing according to Manitoba CervixCheck guidelines for cis women.
  - After hysterectomy, vaginal vault screening is not recommended if hysterectomy was total, for benign reasons and no previous high-grade Pap results. If uncertain, continue screening until 2 negative vault tests are obtained
  - Offer HPV vaccination if indicated (Manitoba Health covers vaccination for transgender clients ages 9-26).
- Uterus
  - Recurrence of menses after a period of testosterone-induced amenorrhea should be investigated as abnormal uterine bleeding if no other explanation is available (eg. missed testosterone dose or low serum testosterone levels)
- 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 oophorectomy and has not been on hormone therapy for > 2 years) STIs: Offer screening as appropriate, with frequency depending on risk

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.