Mountain West AIDS Education and Training Center

Affirming Care of the Transgender Patient

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URL: http://rwpoll.com

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Hormone Initiation

- Referral letter from trans-competent mental health provider
- Informed consent from prescriber:
 - Risks and side effects
 - Physical and emotional changes
 - Expectations
 - Social Impact
 - Fertility
 - Goals of patient/alternatives

Contraindications to Hormone Initiation

- Hormone-responsive cancer
- Untreated venous/arterial thromboembolism
- History suggesting untreated hypercoagulable state
- Consider avoiding spironolactone if on ACE I/diuretics, renal dysfunction, low blood pressure

Timeline for Physical Changes: Trans-masculine

EFFECT	Onset (months)	Maximum (years)
Skin oiliness/acne	1-6	1-2
Facial/body hair growth	6-12	4-5
Scalp hair loss	6-12	indefinite
Increased muscle mass	6-12	2-5
Fat redistribution	1-6	2-5
Cessation of menses	2-6	indefinite
Clitoral enlargement	3-6	1-2
Deeping of voice	6-12	1-2

Timeline for Physical Changes: Trans-feminine

Effect	Onset (months)	Maximum (years)
Redistribution of body fat	3-6	2-3
Decrease in muscle mass	3-6	1-2
Softening skin	3-6	unknown
Decreased libido	1-3	3-6
Decreased erections	1-3	3-6
Breast growth	3-6	2-3
Decreased testicular volume	3-6	2-3
Decreased sperm production	unknown	> 3 years
Decreased hair growth	6-12	>3 years
Scalp hair	No regrowth	
Voice changes	none	
Hembree et al., J Clin Endocrino	Metab, 2009	

Common Side Effects: Trans-masculine

- Mood changes: irritability, anger, mood swings, anxiety
- Weight gain
- Vaginal atrophy
- Pelvic pain
- Acne
- Polycythemia
- Elevated transaminases

Common Side Effects: Trans-feminine

- Orthostatic hypotension/dizziness
- Mood issues: depression, increased emotional range, mood swings, anxiety
- Weight gain
- Fatigue
- Sexual dysfunction
- Renal dysfunction/hyperkalemia

Potential Risks Based on Limited Data

- VTE: 1-2% of MTF patients, risk greatest 1st year of therapy, tobacco abuse, peri-operative period
- Breast cancer: no increased risk compared to general population
- Endometrial cancer: FTM case reports
- CAD risk: increased in MTF but associated with ethinyl estradiol use and other CV risk factors
- Worsened CV risk factors in FTM but no increased rates CV events or mortality

Baseline Labs

Transmasculine	Transfeminine
Comp/CMP	Comp/CMP
CBC	CBC
+/- lipid	+/- lipid
+/- HIV/STI screen	+/- HIV/STI screen
+/- testosterone if PCOS	+/- testosterone
+/- HCG	+/- prolactin if on anti-psychotics

Trans-masculine Regimen

Name	Starting dose	Standard dose range
Testosterone cypionate (cottonseed) 200mg/ml	0.15 ml – 0.2 ml weekly	0.35 ml -0.5 ml weekly or 0.7 ml - 1 ml q 14 days
Testosterone enanthate (sesame) 200mg/ml	0.15 ml – 0.2 ml weekly	0.35 ml -0.5 ml weekly or 0.7ml – 1 ml q 14 days
Androgel/topical testosterone	12.5 mg -25 mg TD qd	50 mg -100 mg TD qd
Androderm patch 2 mg or 4 mg	4mg qd	6 mg

Fenway Health: The Medical Care of Transgender Persons, 2015

Trans-masculine Monitoring Parameters

- Q 3 months x 1 year then q 6 months
- Effects?
- Side effects?
- Documentation needs
- Risk HIV/STI, pregnancy risk
- Surgical gender affirmation--? Top surgery
- Labs: HCT/HGB, COMP/CMP, testosterone level

Testosterone Levels: Trans-masculine

- Goal normal male level 400 ng/dl 900 ng/dl
- Trough level: (around) 400 ng/dl
- Mid week level: 500 ng/dl 600 ng/dl

Trans-feminine Regimen: androgen blockers

Name	Starting dose	Standard dose range
Spironolactone	50 mg qd, 50 mg BID after 7 days	50 mg BID – 150 mg BID
Finasteride	5 mg 0.25 tab – 1 tab qd	5 mg 0.25 tab – 1 tab qd
Prometrium (progesterone-no consensus on use)	100 mg – 200 mg qd	100 mg – 200 mg qd

Fenway Health: The Medical Care of Transgender Persons, 2015

Trans-feminine: estradiols

Name	Starting dose	Standard dose range
Estradiol patch	0.1 mg once or twice a week depending on formulation	0.1 mg – 0.4 mg once or twice a week depending on formulation
Oral estradiol	2 mg qd sublingual	4 mg – 8 mg qd usually divided into BID doses
Injectable: estradiol valerate 40 mg/ml	0.15 ml – 0.25 ml weekly	0.15 ml – 0.25 ml weekly

Trans-feminine Monitoring Parameters

- Q 6-8 weeks if spironolactone dose increased, q 3 months x
 1 year then q 6 months
- Effects?
- Side effects?
- Documentation needs
- Risk HIV/STI
- Surgical affirmation procedure/hair removal
- Labs: BUN/Cr, K, testosterone level, estradiol level

Hormone Level Goals

- Testosterone level goal < 50 ng/dl
- Estradiol levels: goal range 80-250 pg/ml

Resources

 UCSF: Center of Excellence for Transgender Health <u>http://transhealth.ucsf.edu/trans?page=guidelines-home</u>

Fenway Health: The Medical Care of Transgender Persons http://transhealth.ucsf.edu/trans?page=guidelines-home

Endocrine Treatment of Transsexual Persons: An Endocrine Society Clinical Practice Guideline

http://press.endocrine.org/doi/pdf/10.1210/jc.2009-0345

Resources Continued

- Ingersoll Gender Center (Resources for patients and providers in the NW)
- http://ingersollcenter.org/
- National Center for Transgender Equality
- http://www.transequality.org/