Care for Transgender Patient: Providing Competent and Compassionate Care During a Time of Transition

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Objectives

• To review guidelines for establishing care of transgender patients
• To review screening questions and special considerations for transgender patients
• To review options for transgender medical and surgical transition

Disclosures

I have no relevant financial relationships to disclose.
“Doctors can kind of go two ways, right? You can either see a whole bunch of life and decide that there’s no point in being judgmental – everyone’s different and, you know, everyone’s got their own path in life and not to judge people – or you can get really narrow-minded and somehow build this construct between ‘us’ and ‘them’, with ‘them’ being the patients.”

“I think one issue that concerns me is the lack of training and/or exposure that med students and residents have to the transgendered population and indeed the general population of people. you know often will think they’ve never met a trans person. Well many of them have. So you know the feeling that ‘well this doesn’t affect my practice or my life’ perpetuates the idea that there’s just no need for training around Trans issues.”

“What I’ve had to do is rely on the patient to tell me how best to manage, and not that I’m averse to that, but that’s pretty suboptimal when patients have to tell doctors, you know, how to do what we should know how to do.”

LGBT Statistics

- LGBT youth are 2-3 x more likely to attempt suicide
- LGBT youth are more likely to be homeless
- Transgender individuals have a high prevalence of HIV/STDs, victimization, mental health issues, and suicide and are less likely to have health insurance than heterosexual or LGB individuals.
- LGBT populations have the highest rates of tobacco, alcohol, and other drug use
School Victimization

- Lesbian, gay, bisexual, and transgender-related school victimization is strongly linked to young adult mental health and risk for STDs and HIV
- There is no strong association with substance use or abuse.
- Elevated levels of depression and suicidal ideation among males can be explained by their high rates of LGBT school victimization

Russell, 2011

Home Life...

- Approximately 30% of LGBT youth report physical abuse by a family member because of sexual orientation or gender identity/expression

Minorityhealth.hhs.gov

Childhood vs Adolescence

**Adolescent**
- Much higher rate of persistence than in children
  - One study of 70; all persisted
- Ratio of male:female is 1:1

**Child**
- Dysphoria persists in 6-27%
- Boys more likely to identify as gay in adulthood
- Ratio of male:female is 6:1 to 3:1

WPATH SOC
Phenomenology in Children

- Features can develop as young as age 2
- Express discomfort with body
- Express desire to be the other sex
- Prefer clothing/toys/games commonly associated with the other sex
- Prefer playing with other sex peers
- Uncommon to also express anxiety or depression

Phenomenology in Adolescents

- May have intensity of feelings at time of puberty as secondary sex characteristics develop
- Many do not report a history of childhood gender-nonconforming behaviors

Barriers to Providing Care

- Survey of 184 physicians:
  - The majority of physicians would not regularly discuss sexual orientation, sexual attraction, or gender identity while taking a sexual history from a sexually active adolescent.
  - The majority of physicians would not ask patients about sexual orientation if an adolescent presented with depression, suicidal thoughts, or had attempted suicide.
  - If an adolescent stated that he or she was not sexually active, 41% of physicians reported that they would not ask additional sexual health-related questions.
  - Only 57% agreed to an association between being a LGBTQ adolescent and suicide.
  - The majority of physicians did not believe that they had all the skills they needed to address issues of sexual orientation with adolescents, and that sexual orientation should be addressed more often with these patients and in the course of training.
Barriers to Providing Care

• Lack of appropriate accommodations in outpatient and inpatient setting

• Scheduling difficulties
  – Lab
  – Surgical

• Lack of specific training opportunities

• Personal belief structure

Barriers to Receiving Care

• Over represented in the foster care system

• Abandonment/abuse in system or with family

• Often wind up homeless
  – One in five transgender people will find themselves in need of homeless shelter assistance

• Health care provider discomfort may alienate patients and result in low quality or inappropriate care
  – May deter from seeking additional care

Initial Evaluation

• Discuss support structure
• Screen for risk status
• Discuss online support venues and safety
• Screen for school performance issues
• Coexisting medical conditions
• Reproductive goals
• Sensitive exams can be based on individual risk assessment and preventative health care needs
Treatment

- Percentage of treated individuals is a function of the organization they are a part of
  - Insurance, cultural, health professional opinions, diagnostic procedure availability

- Psychosocial evaluation is critical

Array of Options

- Voice and communication therapy
  - Help individuals develop verbal and nonverbal communication skills to facilitate comfort with gender identity

- Hair removal

- Breast binding or padding

- Genital tucking or penile prosthesis

- Padding of hips/buttocks

- Pubertal suppression

- Cross gender hormone therapy

Social Transitioning

- Social transition can sometimes be completed before puberty

- Success varies widely based on support of the family

- No evidence to predict long-term outcomes in completing this transition early in childhood

- Mental health professionals can be very helpful in this transitional time
Interventions

• Fully reversible
  – GnRH analogues, progestin, spironolactone, COCs

• Partially reversible
  – Masculinizing or feminizing hormones
  – Some effects are not reversible without surgical correction
    • Gynecomastia, deepening of voice

• Irreversible
  • Surgical procedures

Fully Reversible Interventions

• Eligible for puberty-suppressing hormones as soon as pubertal changes noted

• Should at least experience Tanner 2
  – Remember this may be very young!

• Gives adolescents more time to explore their gender nonconformity

• Can prevent development of sex characteristics that can only be reversed surgically

• Pubertal suppression does not inevitably lead to transition or sex reassignment

Criteria for Pubertal Suppression

• The adolescent has demonstrated a long-lasting and intense pattern of gender nonconformity or dysphoria

• Emerged or worsened with the onset of puberty

• Coexisting psychological, medical, or social problems that could interfere with treatment have been addressed

• Informed consent has been obtained
Follow up Protocol

- Every 3 months
  - Anthropometry: height, weight, SMR
  - Laboratory: LH, FSH, estradiol/testosterone

- Every year
  - Laboratory: renal and liver function, lipids, glucose, insulin, glycosylated hemoglobin
  - Bone density using dual-energy x-ray absorptiometry
  - Bone age or x-ray of the left hand

Role for Hormones

Denying access to hormones “represents a refusal to recognize the humanity of trans people, frustrates their ability to self-determine their gender, infringes on personal autonomy, and adds to the cumulative effect of the constant discrimination they confront”

Gehr, 2007

Cross-gender Hormone Therapy

**MTF transsexual persons**

- **Estrogen:**
  - Oral: estradiol 2-6 mg/d
  - Transdermal: estradiol patch 1-5.4 mg/week
  - Parenteral: estradiol valerate or cypionate 5-100 mg IM every 2 wk-10 mg IM every week

- **Antianandrogens:**
  - Spironolactone 100-200 mg/d
  - Cyproterone acetate 50-100 mg/d
  - GnRH agonist: 3.75 mg sc monthly

**FTM transsexual persons**

- **Testosterone**
  - Oral:
    - testosterone undecanoate 160-240 mg/d
  - Parenteral:
    - Testosterone enanthate or cypionate 100-200 mg IM every 2 wk or 50% weekly
    - Testosterone undecanoate 1000 mg every 12 wk
### Expected Effects of Masculinizing Hormones

- Skin oiliness/acne
- Facial/body hair growth
- Scalp hair loss
- Increased muscle mass/strength
- Body fat redistribution
- Cessation of menses
- Clitoral enlargement
- Vaginal atrophy
- Deepened voice

### Expected Effects of Feminizing Hormones

- Body fat redistribution
- Decreased muscle mass/strength
- Softening of skin/decreased oiliness
- Decreased libido
- Decreased spontaneous erections
- Male sexual dysfunction
- Breast growth
- Decreased testicular volume
- Decreased sperm production
- Thinning of facial and body hair
- Male pattern baldness

### Surveillance (MTF)

1. Evaluate patient every 2–3 months in the first year and then 1–2 times per year afterward to monitor for appropriate signs of feminization and for development of adverse reactions.
2. Measure serum testosterone and estradiol every 3 months.
   a. Serum testosterone levels should be $<55$ ng/dl.
   b. Serum estradiol should not exceed the peak physiological range for young healthy females, with ideal levels $<200$ pg/ml.
   c. Doses of estrogen should be adjusted according to the serum levels of estradiol.
3. For individuals on spironolactone, serum electrolytes (particularly potassium) should be monitored every 2–3 months initially in the first year.
4. Routine cancer screening is recommended in nontranssexual individuals (breasts, colon, prostate).
5. Consider BMD testing at baseline if risk factors for osteoporotic fracture are present (e.g., previous fracture, family history, glucocorticoid use, prolonged hypogonadism). In individuals at low risk, screening for osteoporosis should be conducted at age 60 and in those who are not compliant with hormone therapy.
Surveillance (FTM)

1. Evaluate patient every 2–3 months in the first year and then 1–2 times per year to monitor for appropriate signs of virilization and for development of adverse reactions.

2. Measure serum testosterone every 2–3 months until levels are in the normal physiological male range:
   - For testosterone enanthate/cypionate injections, the testosterone level should be measured midway between injections. If the level is >700 ng/dl or <350 ng/dl, adjust dose accordingly.
   - For parenteral testosterone undecanoate, testosterone should be measured just before the next injection.
   - For transdermal testosterone, the testosterone level can be measured at any time after 1 wk.
   - For oral testosterone undecanoate, the testosterone level should be measured 3–5 h after ingestion.
   - Note: During the first 3–6 months of testosterone treatment, total testosterone levels may be high, although free testosterone levels are normal, due to high SHBG levels in some biological women.

3. Measure estradiol levels during the first 6 months of testosterone treatment or until there has been no uterine bleeding for 6 months. Estradiol levels should be <50 pg/ml.

4. Measure complete blood count and liver function tests at baseline and every 3 months for the first year and then 1–2 times a year. Monitor weight, blood pressure, lipids, fasting blood sugar (if family history of diabetes), and hemoglobin A1c (if diabetic) at regular visits.

5. Consider BMD testing at baseline if risk factors for osteoporotic fracture are present (e.g., previous fracture, family history, glucocorticoid use, prolonged hypogonadism). In individuals at low risk, screening for osteoporosis should be conducted at age 60 and in those who are not compliant with hormone therapy.

6. If cervical tissue is present, an annual pap smear is recommended by the American College of Obstetricians and Gynecologists.

7. If mastectomy is not performed, then consider mammogram as recommended by the American Cancer Society.

Appropriate Scenarios for Provision of Hormones

- Bridging
- Hormone therapy following gonad removal
- Hormone maintenance prior to gonad removal
- Hormone initiation

Surgical Considerations

- For many, sex reassignment surgery is medically necessary
  - Relief of gender dysphoria can’t be accomplished without it

- Surgical outcomes are generally favorable
  - Improved well being, cosmesis, and sexual function

- Mental health is reliably improved

DeCuypere, 2005
Surgical Considerations

- Breast and genital surgery should be performed only after assessment by qualified mental health professionals
  - Medically necessary based on gender dysphoria diagnosis
- 12 months of hormone therapy is typically recommended prior to performing any irreversible procedures

MTF Surgical Options

- Breast/chest surgery: augmentation mammoplasty
- Genital surgery: penectomy, orchiectomy, vaginoplasty, clitoroplasty, vulvoplasty
- Feminizing procedures: facial feminization surgery, liposuction, lipofilling, voice surgery, thyroid cartilage reduction (tracheal shaving) gluteal augmentation

FTM Surgical Options

- Breast/chest surgery: subcutaneous mastectomy, chest contouring
  - May be considered before age 18
- Genital surgery: hysterectomy with salpingooophorectomy, metoidioplasty/phalloplasty
Appropriate Candidates

- Historically reserved for patients over age 18
- Real-life experience has resulted in satisfactory social role change
- Individual is satisfied with hormonal effects
  - One year of consistent and compliant hormone tx
- Individual desires definitive social change

Endocrine Society, 2009

Resources for Health Professionals

- World Professional Organization for Transgender Health (WPATH) www.wpath.org
- The Center of Excellence for Transgender Health www.transhealth.ucsf.edu
- Endocrine Treatment of Transsexual Persons press.endocrine.org
- www.acog.org

Milwaukee Area Resources

- LGBT Community Center - mkelgbt.org
  - Gemini Gender Group
  - Project Q (youth)
- Wisconsin Rainbow Families - www.wirainbowfamilies.com
- Diverse and Resilient - www.diverseandresilient.org
- FORGE - www.forge-forward.org
- Uplasticsurgery.com
**Madison Area Resources**

- Outreach - www.lgbtoutreach.org
- UW-Madison Family Medicine Clinics (Resident Clinics; Children, teens & adults)
- Northeast Clinic - (608)241-9020
- Wingra clinic - (608)263-3111
- PATH (Pediatric and Adolescent Transgender Health) – uwhealthkids.org
- Uplasticsurgery.com

**References**


**Questions?**