Caring for the transgender patient in the inpatient setting

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Disclosures

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Introduction

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THINK OUTSIDE THE BOXES
World Gender Customs
How common is being transgender?

0.6% of adults *(Williams Institute 2016)*

**Prevalence:**
- Epilepsy 0.8%
- Down’s Syndrome 0.1%
- Type 1 DM 0.5%

*Transgender people make up a small but significant portion of our population.*
We can do better.

Adult transgender patients report discrimination and harassment at physician offices.
- 24% of transgender adults refused care at a doctor's office.
- 1 in 3 trans adults delay preventive care due to discrimination.
  - JM Grant et al., "Injustice at Every Turn: A Report of the National Transgender Discrimination Survey" 2011

How does your hospital rate?
Kids need us.

80% of trans students feel unsafe at school because of their gender expression

- School Climate Survey: The experiences of LGBT Youth in our nation’s school, GLSEN 2010

Trans youth have higher rates of:
- Depression and Anxiety (2-3x more common)
- Suicide (40% attempt)
- Bullying victimization
- Physical and sexual assault

Parents Respect Us.

Parents Accepting
Parents Unsupportive

Trans Student Educational Resources
Terminology

**Gender non-conformity is not the same as gender dysphoria**

**Gender Nonconformity**
The extent to which a person's gender identity, role, or expression differs from cultural norms prescribed for people of a particular sex

People may also use the terms gender fluid, gender independent, gender questioning or agender

**Gender Dysphoria (DSM V)**
Discomfort or distress that is caused by a discrepancy between a person's gender identity and that person's sex assigned at birth

Formerly referred to as “Gender Identity Disorder” in DSM IV

**Transgender**
Umbrella term describing persons whose gender identity, expression, or behaviors fall outside cultural norms for their biologic sex; often called “trans” or “trans*”

**Cisgender**
Individuals for whom gender and physical sex characteristics are in alignment. The prefix “cis” means “on the same side as”

**Intersex/Disorders of Sexual Development (DSD)**
Refers to a group of medical conditions in which an infant’s or child’s reproductive organs are not clearly male or female, affecting the way sex is assigned. This is separate from transgender or gender identity
Terms to avoid

These terms can have negative connotations and may be considered offensive or polarizing

**Biologically male/female; genetically male/female; born a man/woman**
Assert the notion that biology (chromosomes and genitalia) trumps other factors when thinking about someone’s gender

**Pre-op(erative)/Post-op(erative)**
Inaccurately suggests that one must have surgery to transition

**Tranny; she-male; he/she; it**
These labels have been used as defamatory slurs

**Transsexual**
An older term, specifically refers to individuals who have physically altered their bodies through either hormones or surgery

**Sex Change Operation**
If necessary, refer to “sex reassignment surgery (SRS)” or “gender affirmation surgery”

Pronoun Awareness

Depending on where someone falls on the gender spectrum and how they identify, they may have a preference specific pronouns

**Using someone’s preferred pronouns demonstrates awareness and respect for their gender identity**

Do your best with humility and ask for help.
Current Treatment Recommendations

GENDER AFFIRMING

Does not view gender variance as a mental illness.

Supports children in living as they feel most comfortable and promotes exploration of gender identity

Goal is to meet the medical and mental health needs of youth with gender variance.

REPARATIVE

Aimed at changing gender identity or expression and promoting accepting the natal sex.

Unsuccessful

Harmful

Banned by the APA x2, AAP, AMA, NEA and more...

Persistence of GD

Not all gender non-conforming children will go on to adult transgender identity.

At puberty, patients still affirming transgender identity will likely have persistent gender dysphoria.

DeVries et al:

- 70 children diagnosed with gender dysphoria and treated with hormone suppression, 100% of patients continued on to medical and/or surgical transition during adolescence/adulthood

- DeVries et. al, J Sex Med 2011;8:2276-2283
Degrees of transitioning

**Social** – involves changing name, pronouns, and external appearance
  - Home
  - School

**Medical** – involves puberty suppression (reversible) and cross-sex hormone therapy (partially reversible)

**Surgical (irreversible)**

Satisfaction with Transition

94% of trans people reported improvement in their quality of life by transitioning.

96% reported that their sense of well-being improved by transitioning.

Transition satisfaction rates:
  - 96% overall
  - 97% hormone therapy
  - 96% chest surgery
  - 90% genital surgery

Guardians of Childhood, Meet your opponents

What you might hear...

This is a mental disorder.

We should encourage children to accept their biological sex.

This is experimental treatment.
Professional Guidelines

Many medical societies have consensus statements supporting gender-affirming care...AAP, AMA, AACAP and more!

Pediatric Endocrine Society Guidelines:

World Professional Association for Transgender Health (WPATH):
http://www.wpath.org

Center of Excellence for Transgender Health, Department of Family and Community Medicine, University of California San Francisco. Guidelines for the Primary and Gender-Affirming Care of Transgender and Gender Nonbinary People; 2nd edition. Deutsch MB, ed. June 2016. Available at www.transhealth.ucsf.edu/guidelines.

#ProtectTransKids
Human Rights Campaign

Compassion is the basis of all morality.
Arthur Shopenhaur
The Stages of Transition

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Guidelines
Guidelines

Center of Excellence for Transgender Health, Department of Family and Community Medicine, University of California San Francisco. Guidelines for the Primary and Gender-Affirming Care of Transgender and Gender Nonbinary People; 2nd edition. Deutsch MB, ed. June 2016.

Available at www.transhealth.ucsf.edu/guidelines.

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Early Puberty

GnRH Analogues

Available at Tanner Stage 2
Suppresses endogenous sex hormone production
- Brief stimulatory period
Prevents development of sex characteristics that are difficult or impossible to reverse
Gives more time to explore gender and developmental issues
Allows for lower doses of estrogen/testosterone therapy if gender affirming hormones are pursued

Early Puberty

GnRH Analogue
Available in two forms:
- Histrelin Subcutaneous Implant
  Effective for 12 months
- Leuprolide Intramuscular Injection
  Available in every 1 or 3 month preparations
Physical effects typically viewed as reversible


Early Puberty

GnRH Analogue
Patients can stop hormone suppression and proceed with biologic puberty
No permanent effects on fertility
Unknown long term effects on bone health and density
Unknown long term effects on brain development
*Early suppression of transgender females could lead to insufficient penile tissue for vaginoplasty

Figure 1. Longitudinal analysis (model: 240) showing CIs of the ES from start medical treatment until the age of 22 years in transmen and transwomen
Late Puberty/Adult

GnRH agonists can still be used

Exogenous Estrogen/Testosterone
Develop desired secondary sex characteristics and
suppress/minimize undesired secondary sex characteristics

Guidelines suggest initiation at 16 years of age with parental consent
If on pubertal suppressing agents, delaying until 16 years
could significantly impact bone health
Psychosocial isolation from peers
Several gender centers start between 14-16 years

Feminizing Therapy

Exogenous 17-beta estradiol (patch, pill and injection)
Ethinyl estradiol not recommended
Side effects include migraines, mood swings, hot flashes, weight gain, poor energy, impaired fertility,
decreased libido and erectile dysfunction
Anti-androgens
Less effective than full blockade
Spironolactone
- Potassium sparing diuretic with direct anti-androgen receptor activity AND suppressive effect on
testosterone synthesis
- Monitor for hyperkalemia
5-alpha reductase inhibitors (finasteride/dutasteride)
- Blocks conversion of testosterone to dihydrotestosterone (more potent androgen)
Masculinizing Therapy

Testosterone

Injection (subcutaneous or intramuscular), Topical (creams, gels, nasal, buccal) and Pellet Implants

Injection labeled for intramuscular route only but subcutaneous route shown to have equal efficacy and improved patient satisfaction

Benefits of subcutaneous administration include a smaller and less painful needle, and may avoid scarring or fibrosis from long term (possibly > 50 years) intramuscular therapy

Side effects include hair loss, unwanted body hair, acne, vaginal atrophy, secondary exposure for cis-gender women and children, reduced fertility, abnormal fetal development, acne, sex drive and cell phone
TABLE 1A: EFFECTS AND EXPECTED TIME COURSE OF MASCLINIZING HORMONES

<table>
<thead>
<tr>
<th>Effect</th>
<th>Expected Onset</th>
<th>Expected Maximum Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin oiliness/ acne</td>
<td>1-6 months</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Facial/ body hair growth</td>
<td>3-6 months</td>
<td>3-5 years</td>
</tr>
<tr>
<td>Sealy hair loss</td>
<td>&gt; 12 months¹</td>
<td>variable</td>
</tr>
<tr>
<td>Increased muscle mass/strength</td>
<td>6-12 months²</td>
<td>2-3 years²</td>
</tr>
<tr>
<td>Body fat redistribution</td>
<td>3-6 months</td>
<td>2-5 years</td>
</tr>
<tr>
<td>Cessation of menses</td>
<td>2-6 months</td>
<td>n/a</td>
</tr>
<tr>
<td>Clitoral enlargement</td>
<td>3-6 months</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Vaginal atrophy</td>
<td>3-6 months</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Deepened voice</td>
<td>3-12 months</td>
<td>1-2 years</td>
</tr>
</tbody>
</table>

¹ Adapted with permission from Hendraw et al. (2006). Copyright 2006, The Endocrine Society
² Estimates represent published and unpublished clinical observations.
³ Significantly dependent on age at initiation, may be necessary.

Mental Health Support
Historically mental health provider authenticated gender identity and require referral letter prior to therapy (Gatekeeper)

This approach is rapidly falling out of favor

Being replaced by a support model

Should not attempt to force youth to accept sex assigned at birth
Informed Consent

Historically mental health professional referral letter required prior hormonal therapy
Most transgender care providers have transitioned to informed consent pathway
  ◦ Requires comfortability with making assessment of gender dysphoria and capacity to consent
Counseling may be an necessary for some but as a supportive mechanism
Informed consent handouts available on line and cover expectation and risks
  ◦ Physical changes
  ◦ Emotion changes
  ◦ Effects on fertility
  ◦ Sections on medications and each ones effects
Many providers transitioning away from required signing of informed consent forms

Risks of Feminizing Hormone Therapy

Thromboembolic Disease
  Additional increase risk in >40 years of age, tobacco users, sedentary and obese
  Risk decreased with transdermal/IM route of estradiol
  Highest risk during the first year of therapy

Cardiovascular/Cerebrovascular Disease
  Evidence in transgender women is unclear
  Higher rates of tobacco use, obesity, age >40 years, diabetes and lipid disorders, and reduced physical activity
  Transdermal route has lower risk

Liver Disease
  May have transient liver enzyme elevations and, rarely, clinical hepatotoxicity

Epilepsy/Seizure Disorder
  Lowers seizure threshold and may exacerbate underlying seizure disorders
Risks of Feminizing Hormone Therapy

Cancer
- No identified difference in general cancer rate in transgender patients on hormone therapy compared to sex-assigned controls.
- Insufficient evidence of changes in risk factor for organ-specific cancer risk

Breast Cancer
- Transwomen on estrogen have developed breast cancer but degree of risk compared to cisgender female peers poorly studied
- Duration of estrogen exposure, family history of breast cancer, obesity and use of progestins likely influence the level of risk
- If a patient has a particular organ, screening should occur regardless of hormone use

Hyperprolactinemia
- Increased risk during the first year of therapy
  - Unlikely to develop after the first year
- May promote the clinical appearance of pre-existing but clinically unapparent prolactinoma
- Expectant management only in absence of visual disturbance, galactorrhea or new onset headaches

Migraines
- Exacerbate migraine events
Risks of Feminizing Hormone Therapy

Peri-operative Use
- Many surgeons prefer that estrogen be discontinued for at least 2 weeks before and after any procedure
- Can have profound impact to patient
- No evidence suggests that transgender women who lack risk factors (personal/family history, excessive use of estrogen, smoking) must cease peri-operatively
- Appropriate use of prophylaxis (heparin or compression devices)
- Informed consent of pros and cons
Alt. alternatives:
- Lower estrogen dose
- Convert to transdermal route

Risks of Masculinizing Hormone Therapy

Polycthemia/Erythrocytosis
- Hgb & Hct levels should be interpreted in terms of dosing and menstruation status
  - Physiologic male range testosterone and amenorrhea: expect male range Hgb/Hct

Mental Health Conditions/Aggression
- No clear evidence of direct association between testosterone and mental health status
- May see some influence when on higher doses or supra-physiologic blood levels

Hair Loss
- Unpredictable nature, extent and time course
- Managed with 5-alpha reductase inhibitors,
Risks of Masculinizing Hormone Therapy

Metabolic Syndrome/PCOS
Not contraindicated but require monitoring for dyslipidemias and diabetes

Liver Disease
May have transient liver enzyme elevations

Cancer
No clear increased risk for breast, cervical, ovarian or endometrial cancers

Cardiovascular
Evidence suggests that risk is unchanged among transgender men using testosterone compared with non-transgender women

Surgical Interventions

Transgender women
Top Surgery: Mastectomy
Bottom Surgery: Vaginoplasty, Orchiectomy
Other: Facial feminization procedures, Reduction thyrochondroplasty (tracheal cartilage shave), Voice surgery

Transgender men
Top Surgery: Mammaplasty
Bottom Surgery: Phalloplasty/Metoidioplasty with Scrotoplasty, Vaginectomy, Hysterectomy, Oophorectomy
Other: Facial hair removal
Other Special Considerations

Chest Binding
- Provides a flat chest contour
- Tight fitting sport bras, shirts, ace bandages,
- Prolonged use can cause breast pain, skin irritation or fungal infections

Genital Tucking
- Provides a smooth groin contour
- Testicles moved into inguinal canal
- Penis and scrotum moved posteriorly to the perineum
- Tight fitting underwear or special undergarment (gaffe)
- Some use adhesives or duct tape
- Prolonged use can cause skin irritation, hernias, genitourinary tract trauma/infection, testicular pain/torsion/trauma

Cases
PURVI SHAH M.D.
Transgender affirming hospital policies

1. Gender Identity nondiscrimination policy
2. Access to hormone therapy
3. Protocols for interaction with transgender patients
4. Assign room placement based on patient’s self-identified gender
5. Patients may use the restroom that matches their gender identity
6. Access to personal items that assist in gender presentation

Case #1

• 4 year old female admitted with left arm cellulitis
• Parents are concerned because she refuses to wear dresses or bows in her hair
• She is obsessed with Thomas the Tank engine
• She will only play with boys at her preschool
• While role playing, she prefers to be the knight or king instead of the princess.
Case #1

- Exploration of gender identity is a normal part of development
- Not all individuals with gender variance will develop adult transgender identity.
- Encourage parents to accept the patient’s requests

Case #2

- 11 year old female is admitted for pyelonephritis
- She is started on IV antibiotics and fluids
- The following morning, she is clinically improved and the team begins discharge planning
Case #2

• After rounds, the patient’s mother pulls you aside and expresses concerns regarding her daughter.
• Additional history reveals a decline in academic performance during the past year. She has become withdrawn from her friends and increasingly defiant at home.
• She has also started cutting herself and has scars on both her forearms.

*Open ended gender neutral questions*

Source: AAP Technical Report

Source: Pediatrics in Review 37:89-96
Case #2

• On exam, patient has short hair and is dressed in traditional male clothing.
• She has a flat affect and poor eye contact. Healed linear scars are noted on both forearms.
• Tanner 2 breast development

• Patient admits that she has felt like a boy for many years. She would be preferred to be called by male pronouns and would like to change her name
• He was okay being a “tomboy” but since his body has started changing, he has felt more anxious
Case #2

- Puberty is associated with increase in high risk behavior and suicide
- Diagnostic criteria for gender dysphoria
- Ideal candidate for puberty suppression

![Diagnostic Criteria for Gender Dysphoria](image)

Source: Pediatrics in Review 37:89-96

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Case #2 Advocacy

- Facilitate open discussion between patient and his parents
- Opportunity to advocate for the patient to access the restroom that matches the patient’s gender identity at school and in the community

Source: AAP Technical Report

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**TABLE T.4** Support and Advocacy Organizations

<table>
<thead>
<tr>
<th>Organization</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Gay, Lesbian, and Straight Education Network</td>
<td><a href="http://glsen.org">glsen.org</a></td>
</tr>
<tr>
<td>Familias Latinas sin Fronteras (FLSF)</td>
<td><a href="http://flsf.org">flsf.org</a></td>
</tr>
<tr>
<td>National Center for Transgender Equality (NCTE)</td>
<td><a href="http://ncteq.org">ncteq.org</a></td>
</tr>
<tr>
<td>Health Education and Research (HER)</td>
<td><a href="http://her.org">her.org</a></td>
</tr>
<tr>
<td>The Transgender Law Center (TLC)</td>
<td><a href="http://tlc.org">tlc.org</a></td>
</tr>
<tr>
<td>The Trevor Project</td>
<td><a href="http://trevor.org">trevor.org</a></td>
</tr>
</tbody>
</table>
Case #3

16 year old transgender female being admitted from the Emergency Unit for status asthmaticus.

Case #3: Admission process

• EMR capable of recording both gender assigned at birth (natal sex) and current self-identified gender
• Use of preferred pronouns and name. How will this be communicated to entire caretaking team?
• Allow patient to use the restroom of their choice
• Assign inpatient room based on their gender identity. Provide private room if requested and available
• Have plan in place if no appropriate room is available
Case #3: Inpatient

- Continue hormones during hospitalization
- Ensure patient has access to razors, make-up for gender presentation

Source: Corey Maison Facebook page

Case #4

- New OR nurse who is transgender female
- Don’t forget about the employees!

Source: The Joint Commission
Questions?

References


5. Creating equal access to quality healthcare for transgender patients. Transgender affirming hospital policies.


8. The Joint Commission. Advancing Effective Communication, Cultural Competence, and Patient and Family Centered Care for the LGBT Community. A Field guide.