Providing Cross-Gender Hormone Therapy for Transgender Patients

Gal Mayer, MD

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Polling Question 1

I currently provide the following services to my transgender patients:

a) Mechanism by which to indicate gender pronoun and/or preferred name that is then used by staff
b) Gender neutral or unisex bathrooms
c) Cross-Gender Hormone Therapy
d) Transgender-experienced mental health care (direct or by referral)
e) Referral to surgeons
f) Assistance (direct or by referral) with legal name/gender marker change
g) I do not serve any transgender patients.

Please check all applicable answers in the polling box on your screen. Click “submit” when finished.
Polling Question 2

The barriers to providing these services include:

a) I did not know the service(s) was important

b) Lack of institutional support

c) I have not been trained in how to provide the service(s) safely

d) Concern about insurance coverage issues

e) Concern about medical liability

f) I do not know how to locate appropriate resources in my community

g) Concern about opening a “Pandora’s Box” of problems

h) I do not serve any transgender patients
Continuing Medical Education Disclosure

Program Faculty: Gal Mayer, MD
Current Position: (former) Medical Director, Callen-Lorde Community Health Center
Disclosure: No relevant financial relationships. Virtually all mentioned uses of the hormonal medications contained in this presentation are not FDA-approved and considered off-label.

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Learning Objectives

- Describe how to create a welcoming, inclusive environment for transgender people seeking hormone therapy.
- List ways to provide cross-gender hormone therapy to transgender people by understanding their effects, benefits, risks, and administration.
- Access additional resources for offering effective medical care for transgender people.
Callen-Lorde Community Health Center, NYC

- Primary care
- Cross-gender hormone therapy
- HIV care
- Oral health care
- Gynecology/women’s health
- Mental health/social services
- Sexual health clinic
- Adolescent health
- Mobile health

356 West 18th Street
New York, NY 10011
www.callen-lorde.org
Polling Responses

1. I currently provide the following services to my transgender patients:
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   f) I do not know how to locate appropriate resources in my community
   g) Concern about opening a “Pandora’s Box” of problems
   h) I do not serve any transgender patients.
The Process of “Transition” or “Affirmation”

- The process from living and being perceived as the gender assigned at birth according to the anatomical sex (M or F) to living and being perceived as the individual sees and understands themselves.
- Does not necessarily include surgery or hormones.
- Transgender identity transition can be similar to the LGB “coming out” process.
- Many prefer the term “gender affirmation” or “gender confirmation” over “transition.”
Transition/Affirmation (cont’d)

- Some transitions have milestones (living part-time, living full-time, etc.) and an endpoint, while others are continual processes.
- Transitions happen on many levels: hormonal, linguistic, psychological, intellectual, spiritual, surgical, social, emotional, legal, etc.
- Common terms to describe transition:
  - MTF – male-to-female (transgender women)
  - FTM – female-to-male (transgender men)
  - Genderqueer
Terminology and medical “transition”

Medical Diagnostic Terms

Psychiatric Diagnoses

- DSM IV – Gender Identity Disorder (302.85)
  - Often perceived as pathologizing
- DSM V – Gender Dysphoria
  - Revised definition intended to depathologize by focusing on feeling of incongruence (rather than behavior) and separating it from sexual dysfunctions and paraphilias

Medical Diagnoses

- Transsexualism
  - ICD-9: 302.5x; ICD-10: F64.0

NB: Many clinicians avoid these diagnostic codes and use more neutral ones (i.e. Unspecified Endocrine Disorder 259.9)
Terminology and medical “transition”

Medical Terminology

Cross-Gender Hormone Therapy
- Not universally desired nor necessary (e.g. No-Ho)

Sex Reassignment Surgery (SRS) or Gender Confirming Surgery (GCS)
- Not universally desired (e.g. Non-op)
- Not easily obtainable:
  - Cost/insurance coverage
  - Need to meet criteria
Terminology and medical “transition”

Diverse Utilization of Surgery

Feminizing Procedures

MtF Chest Surgery

- Want Someday: 54%
- Don't Want: 28%
- Have Had: 18%

MtF Vaginoplasty

- Want Someday: 60%
- Don't Want: 20%
- Have Had: 20%

Source: Grant et al., 2010:
http://transequality.org/PDFs/NTDSReportonHealth_final.pdf
Terminology and medical “transition”

Diverse Utilization of Surgery

Masculinizing Procedures

Source: Grant et al., 2010:
http://transequality.org/PDFs/NTDSReportonHealth_final.pdf
Creating a welcoming environment

What can we do?
Creating a welcoming environment

Stressful Psychosocial Realities

- Harassment
- Family Rejection
- Discrimination
- Poverty
- Lack of Health Insurance
- Sexual Assault
- Hate Crimes
- Wrongful Incarceration
- Homelessness
- Police Brutality
- Domestic Violence

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Creating a welcoming environment

Barriers to Healthcare

- Negative prior experience
- Real and perceived hostility in healthcare settings
- Real and perceived lack of provider knowledge
- ID/Identity mismatch
- Lack of insurance/lack of hormone coverage
- Immigration issues
- Hours of clinics
- Disproportionately affected by psychosocial stressors
- Institutional settings - lack of transgender appropriate housing
- Culture of self-sufficiency
Creating a welcoming environment

It’s not just a clinical issue

- Cultural competency and sensitivity training for ALL staff
- Transgender-sensitive and inclusive education brochures, prevention information available
- Become familiar with local support resources
  - Especially for assisting with name or gender designation change
Front-Line Staff Training Tool
www.lgbthealtheducation.org/publications

Affirmative Care for Transgender and Gender Non-Conforming People:
Best Practices for Front-line Health Care Staff

BEST PRACTICES | EXAMPLES
---|---
Avoid using gender terms, like "sir" or "ma'am" when addressing patients
"How may I help you today?"

Avoid gender terms or use gender neutral words such as "they" when talking about patients. Never refer to someone as "it".
"They are here for their 3 o'clock appointment."
"The patient is here in the waiting room."

Politely ask if you are unsure about a patient's preferred name or pronoun
"What name would you like me to use?"
"I would like to be respectful—how would you like to be addressed?"

Ask respectfully about names if they do not match in your records
"Could your chart be under another name?"
"What is the name on your insurance?"

Did you goof? Politely apologize
"I apologize for using the wrong pronoun. I did not mean to disrespect you."

Only ask information that is required
Ask yourself: What do I know? What do I need to know? How can I ask in a sensitive way?

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Creating a **welcoming** environment

**Facilities Matter**

**Unisex or single-use bathrooms**
Creating a welcoming environment

Inclusive Forms

“We require the following information for the purposes of helping our staff use the most respectful language when addressing you, understanding our population better, and fulfilling our grant reporting requirements. The options for some of these questions were provided by our funders. Please help us serve you better by selecting the best answers to these questions. Thank You.”

Sex listed in insured’s health insurance plan:  □ Male  □ Female

Address of insurance:

No marital status question, but “partnered” would be an option if we had one.

Sex Assigned at Birth:
□ Male  □ Female

Gender Identity:
□ Male/Male  □ Female/Woman  □ TransMale/Transman  □ TransFemale/Transwoman
□ Genderqueer/Gender nonconforming  □ Something Else  □ Decline to Answer

Sexual Orientation:
□ Lesbian  □ Gay  □ Bisexual  □ Queer  □ Straight  □ Something Else  □ Decline to Answer

Anticipated annual household income for this year:
Creating a **welcoming** environment

**Use the preferred pronoun**

**Why is using the correct pronoun important?**

It is often stressful, frightening, and difficult for a patient to have to show, say, or write a name or gender that does not match their gender identity and chosen name, or disrobe, talk about body parts, and come out about transgender status.
Creating a welcoming environment

Use the preferred pronoun

Which pronoun is correct to use?

- Consider not using any pronouns (staff training)
- No better way to find out then to ask politely
- If you have to guess, ask yourself what is this person’s gender expression?
- Listen for new pronouns (hir, zie, s/he) and echo back the language you hear
- Once you know the correct pronoun, make an effort to use it consistently
- Everyone slips up; when you do, apologize and try harder next time
Creating a welcoming environment

Examples of TG Sensitivity

Words that are TRANSPHOBIC and WHY

Transphobic. The fear or hatred of transgender people or people who are perceived as not meeting society's expectations around gender roles, identities, and presentations. Transphobia is closely linked with homophobia and biphobia.

**You're such a Tranny.** Whether or not someone identifies as Trans, calling them a "Tranny" can be extremely offensive. This may be a term that people within the community use and reclaim for themselves, but it should not be used as a joke or without consent.

**That person doesn't really look like a man/woman.**

What does it mean to look like a man or a woman? There are no set criteria. It is not correct to assume that all trans men are masculine or that all trans women are feminine, or that all trans people want to look like men or women. Gender presentation is fluid and does not define one's gender identity, and all forms of gender expression deserve affirmation.

**Why would you transition if you're going to be gay?**

Gender identity and sexual orientation are two separate aspects of one's identity. This question demonstrates how heterosexism is more valued in our society, and reinforces homophobia and heterosexism.

**What is your REAL name? I mean the one you were given at birth.**

This implies that someone's gender identity and their given name are not "real" and perpetuates the idea that non-binary and genderqueer people are deceptive. It assumes that being gay is a choice and non-binary or genderqueer people are punished for it.

**Calling someone "it" or "He/She" is demeaning and does not validate their identity or respect them as a person.**

**Using the wrong pronouns or making assumptions about others' gender identities.**

It is vital that we respect the names and pronouns that people prefer. It is impossible to know without asking. If you are not sure, ask: "What are your preferred pronouns?"

**Asking others about Transperson's identity, or offering information about someone.**

Asking someone about another person's identity is inappropriate. Ask yourself why you want to know. If you are concerned about someone's preferred pronouns, ask them directly.

**What are you REALLY? Have you had surgery? If not then you're not really a _________.**

Asking anyone personal questions about their bodies and/or surgeries is intrusive and inappropriate. We don't ask non-trans people what it's like under their clothes, so we shouldn't ask Trans people either.

For more information
contact the UC Davis LGBT Resource Center

lgbtq.ucdavis.edu
toll free: 530.752.2452

(Designed by Clinton Anstor)
Creating a welcoming environment

Inclusive Health Ed Materials

Deserves the same care, no matter which pronoun is used.

Ten Things Transgender Persons Should Discuss with their Health Care Providers

1. Access to Healthcare
   - It is not easy to find a healthcare provider who knows how to treat transgender people. Sometimes it is difficult to find someone who will agree to treat you. Some providers may believe that there is something wrong with you because you are a transgender person. They may not offer the kind of care you need.

2. Health History
   - It is important for you to be open and honest with your healthcare provider. Tell them about the medicines you have taken and the surgeries you may have had. If your healthcare provider is not familiar with transgender people, ask them if they have had experience treating someone else in the same situation.

3. Hormones
   - Transgender people are often prescribed hormone treatment. If you are starting hormone therapy for the first time, ask about the types of hormone therapy that you can take. Ask about the side effects and how to manage them.

4. Cardiovascular Health
   - Transgender people are at increased risk for heart disease, stroke, and other health conditions. Make sure to follow your healthcare provider’s recommendations for managing your cardiovascular health.

5. Cancer
   - Transgender people are at increased risk for certain types of cancer. Make sure to follow your healthcare provider’s recommendations for managing your cancer risk.

I Think I Might Be Transgender, Now What Do I Do?

A Brochure by and for Transgender Youth

National LGBT Health Education Center
A Program of The Fenway Institute
Review of Gender Biology

Setting the Stage for Hormones
Review of gender biology

Sex Hormones

- Acetate
- Cholesterol
- Δ⁵-Pregnenolone
- 17-Hydroxypregnenolone
- Dehydroepiandrosterone
- Testosterone
- Δ⁴-Androstendione
- Estradiol
- Progesterone
- 17-Hydroxyprogesterone
- Cortisol
- 11-Deoxycortisol
- Aldosterone
- Plasma LDL Cholesterol
- Cholesterol
Review of gender biology

Hypothalamic-Pituitary-Gonadal Axis
Review of gender biology

Puberty

Hormonal transition recapitulates puberty

- Development of secondary sex characteristics
- Variable timeline
- Systemic process
- Unpredictable results
## Review of gender biology

### Puberty

<table>
<thead>
<tr>
<th>Tanner Stage</th>
<th>Breast Changes</th>
<th>Puberty</th>
<th>Hormones</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>nipple elevation</td>
<td>&lt;11yo</td>
<td>Pre-hormonal</td>
</tr>
<tr>
<td>2</td>
<td>palpable breast buds; areolae enlarge</td>
<td>11yo</td>
<td>Starting treatment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(9-13)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>elevation of breast contour; areolae enlarge</td>
<td>12yo</td>
<td>6-12 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(10-14)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>areolae form secondary mounds</td>
<td>13yo</td>
<td>1-2 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(10.5-15.5)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>mature breast contour; areolae recess to general breast contour</td>
<td>16yo</td>
<td>2-5 years</td>
</tr>
</tbody>
</table>
Prescribing CGHT

How to do it safely and effectively
Prescribing CGHT

Published Standards

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

Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People

Protocols for the Provision of Hormone Therapy

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Prescribing CGHT

Different Approaches

<table>
<thead>
<tr>
<th>Traditional Model</th>
<th>Informed Consent Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Assignment of mental health diagnosis (GID)</td>
<td>▪ Pathologizing diagnoses not necessary</td>
</tr>
<tr>
<td>▪ Assignment of diagnosis of Transsexualism</td>
<td>▪ No clearance from mental health needed</td>
</tr>
<tr>
<td>▪ Evaluation and clearance for transition by mental health provider</td>
<td>▪ No mandated psychotherapy</td>
</tr>
<tr>
<td>▪ Mandated psychotherapy</td>
<td>▪ No RLE</td>
</tr>
<tr>
<td>▪ Necessity of Real Life Experience (RLE)</td>
<td>▪ Prescription after medical evaluation and obtaining informed consent</td>
</tr>
</tbody>
</table>
Prescribing CGHT

Initial assessment

Keep in mind:

- Transgender patients are likely to have had previous negative healthcare experiences
- Developing trust and rapport may take longer than you are used to
- Avoid genital and rectal exams on the first visit whenever possible
- Be sensitive to dissociation from genitals
- Discuss choice of language to describe anatomy
- Don’t say “pre-op” or “post-op”
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Initial assessment

Thorough history and physical exam:

- Personal or family history of cardiovascular disease, breast cancer, diabetes mellitus, hypertension
- History of hepatitis, thromboembolic disease, or gallstones
- History of prescribed or street hormone use
- History of depression, anxiety, or psychosis
- Alcohol, tobacco, and other drug use including silicone injections and “pump parties”
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Initial assessment

Initial laboratory exams:

- Basic chemistry, liver function tests, lipid profile, hemoglobin/hematocrit
- Prolactin (for MTF), thyroid function, free testosterone (for MTF)
- Hepatitis A, B, C, HIV, syphilis
- For FTM - Pap smear, gonorrhea/chlamydia screen (does not need to be done in 1st appointment)
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Initial assessment

Counseling on minimizing modifiable risk factors:

- Smoking cessation
- Alcohol and drug use harm reduction
- Safer sex
- Proper nutrition and exercise
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Initial assessment

Thorough assessment of the patient’s psychosocial support system:

- Meeting with transgender care coordinator when appropriate, if possible
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Initial assessment

Counseling and Education visit:

- Appointment with RN/health educator for most patients
- Can also be done by mental health provider for patients with mental health issues
- Can also be done by medical provider
- Review of alternatives to and risks/benefits of cross-gender hormone therapy
- Discussion of realistic expectations of physical changes
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Initial assessment

- Once all components have been completed, patient signs a specific informed consent and initial dose of hormones is prescribed
- Stress on harm-reduction approach
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Silicone Use

- >25% of transwomen inject silicone to create a more “feminine” appearance
- May be industrial grade and mixed with paraffin or cooking oil
- Pump Parties – venues for sharing and injecting silicone
- Risks: pulmonary embolism, ARDS, disfigurement, local infection, HCV, HIV, MRSA, mycobacteria
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**Appropriate follow-up**

- Ongoing assessment of patient’s physical, emotional, and psychological changes and reactions to hormone therapy
- Ongoing assessment of the patient’s psychosocial support system
- Ongoing counseling on minimizing modifiable risk factors
Prescribing CGHT

**Appropriate follow-up**

Routine screening on all organs as long as they are present:

- Testicular and prostate* exam
- Pap smear and gonorrhea/chlamydia screening
- Breast exams* and mammograms
- Periodic syphilis, HIV, other STI screening

*not considered routine by current USPSTF guidelines
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Appropriate follow-up

Periodic laboratory testing:

- **MTF**
  - q6-12 mos: fasting glucose, lipid profile, liver function, prolactin
  - as needed: testosterone, potassium, hemoglobin

- **FTM**
  - q6-12 mos: fasting lipids, liver function, hemoglobin
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Appropriate referrals

Referrals to surgeons

- FTM: reduction mammoplasty, liposuction, hysterectomy, salpingo-oophorectomy, vaginectomy, metoidioplasty, scrotoplasty, urethroplasty, phalloplasty, testicular prostheses

- MTF: breast augmentation, tracheal shaving, orchiectomy, penectomy, vaginoplasty, clitoroplasty, labiaplasty, facial bone reduction, rhinoplasty, blepharoplasty, reduction thyroid chondroplasty
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Cross-Gender Hormone Therapy
Prescribing CGHT

General Guidelines

- These medications and dosages are for use in the adult population, not in adolescents still going through puberty
- Slow escalation over first 2-3 months to full doses with frequent monitoring
- Using hormones for gender transition is off-label; as with any medication, safety precautions and adequate monitoring are essential
General Guidelines

- Doses of testosterone and estrogen should be decreased after orchiectomy or hysterectomy with oophorectomy
- Anti-androgen agents may be discontinued after orchiectomy
- After gonadectomy, sex hormones should be continued
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Agents for FTM

Androgens – injectable

- Testosterone (cypionate or enanthate)
  100-300mg (IM) every two weeks

Androgens – other

- Transdermal/Transmucosal Testosterone
  (Androgel, Androderm, Testim, Striant, etc.)
  5-10g daily or usual replacement dose

- Implantable (Testopel)
  150-450mg every 3-6 months
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Agents for MTF

Oral Estrogen

- Estradiol (Estrace)
  6-8mg daily
  *NB:* Most potent estrogen

- Conjugated estrogens
  5-10mg daily
  *NB:* Mixture of nine estrogens; available from animal (Premarin) or plant (Cenestin) sources
Prescribing CGHT

Agents for MTF

Oral Estrogen (continued)

- Esterified estrogens (Estratab, Menest)
  5-10mg daily
  *NB:* Derived from modified soy

- Ethinyl estradiol (oral contraceptives)
  *NB: not* recommended; significant drug interactions with HIV medications; very small dose of estrogen
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Agents for MTF

Injectable Estrogen
- Estradiol valerate (Delestrogen)  
  20-40mg (IM) every two weeks

Transdermal Estrogen
- Estrogen cream (Premarin)
- Estradiol patches (Climara, Estraderm)  
  50-100µg daily
  
  NB: expensive; difficult adherence

Implantable Estrogen
- Estradiol pellets
  
  NB: limited experience; not approved
Prescribing CGHT

Agents for MTF

Progesterone use is controversial in hormone transition. Many experts do not recommend it.

Oral Progesterone

- Medroxyprogesterone acetate (Provera)
  10mg daily for 10 days every 28
- Micronized progesterone (Prometrium)
  200mg daily for 10 days every 28

Injectable Progesterone

- Medroxyprogesterone acetate (Depo-Provera)
  150mg (IM) every six weeks
Prescribing CGHT

Agents for MTF

Anti-Androgens

- Spironolactone (Aldactone)
  100-400mg daily
  Risks: hyperkalemia, hypotension
  NB: $K^+$-sparing diuretic; most popular anti-androgen; interferes with testosterone production and blocks androgen receptors

- Flutamide (Eulexin)
  250-750mg daily
  Risks: hepatic injury, bone marrow toxicity
Anti-Androgens (continued)

- Leuprolide acetate (Lupron)
  3.75mg (IM or SC) monthly
  NB: GnRH analog

- Cyproterone acetate
  (not available in US)

- Ketoconazole (Nizoral)
  NB: anti-fungal agent; risk of hepatic injury precludes its use for this purpose
Prescribing CGHT

Agents for MTF

5-α-Reductase Inhibitors

- Finasteride (Proscar, Propecia)
  1-5mg daily
- Dutasteride (Avodart)
  0.5mg daily
- NB: these agents decrease synthesis of 5-α-dihydrotestosterone; more effective for hair regrowth than other secondary sex characteristics
Prescribing CGHT

Agents for MTF

Other agents with unproven or unclear efficacy that are popular or readily available on the streets

- Clomid
- Vitamin B12
- Oral contraceptives
- HCG analogs
- Ketoconazole
Effects of CGHT

What to expect in hormonal transition
Cross-gender hormone therapy

Androgenic therapy

Testosterone (FTM)

- Deepening of the voice
- Genital changes
  - Irregular menses → cessation of menses
  - Clitoral enlargement
  - Atrophic vaginitis
- Increased libido
- Minimal breast atrophy
- Redistribution of fat from hips to waist
Cross-gender hormone therapy

Androgenic therapy

Testosterone (FTM)
- Increased upper body strength (with exercise)
- Integument
  - Male-pattern facial and body hair growth
  - Male-pattern hair loss
- Psychological sense of well-being
Cross-gender hormone therapy

Androgenic therapy

Testosterone (FTM)

- Side effects: acne, headaches, weight gain, fluid retention
- Risks: polycythemia, hepatotoxicity, worsening of lipid profile and increased homocysteine level, emotional lability, infertility, insulin resistance
Cross-gender hormone therapy

Estrogenic therapy

Estrogens & Anti-androgens (MTF)

- Breast development
  - Magnitude of enlargement is highly variable; size beyond B cup is uncommon
  - Maximum effect after two years

- Integument
  - Body hair diminishment
  - Slowing, stopping, or reversal of androgenic hair loss
  - Softening of the skin
Cross-gender hormone therapy

Estrogenic therapy

Estrogens & Anti-androgens (MTF)
  - Fat redistribution to a gynecoid habitus (smaller waist, wider hips)
  - Reduction in upper body muscle mass and strength
  - May result in loose skin for a short time
  - Psychological sense of well-being
  - No effect on beard hair
    - Longer growth cycle and higher follicle density
    - Electrolysis, laser or other hair removal usually required
Cross-gender hormone therapy

**Estrogenic therapy**

**Estrogens & Anti-androgens (MTF)**
- Genital changes (chemical castration)
  - Testicular atrophy
  - Reduction in penis size
  - Decrease in frequency and strength of erections
  - Decrease in volume and content of semen
  - Reduction in prostate size
- No effect on prominence of larynx
- No effect on pitch and resonance of voice
Cross-gender hormone therapy

**Estrogenic therapy**

**Estrogens & Anti-androgens (MTF)**

- Risks: thromboembolism, increased risk of breast cancer?, hyperprolactinemia/pituitary adenoma, hepatotoxicity, cardiovascular risk?, infertility, anxiety/depression, gallstones, hypertension

- Smoking increases risk of thromboembolism while on estrogen
Cross-gender hormone therapy

**Estrogenic therapy**

Venous Thromboembolism Risk:
Patients at higher risk for thrombotic events may benefit from using transdermal estrogen

<table>
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<tr>
<th></th>
<th>Cases</th>
<th>Controls</th>
<th>Adjusted* OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>No use</td>
<td>145</td>
<td>384</td>
<td>1</td>
</tr>
<tr>
<td>Oral estrogen</td>
<td>45</td>
<td>39</td>
<td>4.2 (1.5-11.6)</td>
</tr>
<tr>
<td>Transdermal estrogen</td>
<td>67</td>
<td>180</td>
<td>0.9 (0.4-2.1)</td>
</tr>
</tbody>
</table>

*Adjusted for obesity, family history of VTE, history of varicose veins, education, age at menopause, hysterectomy, and smoking.

*Circulation. 2007; 115:840-5*
Cross-gender hormone therapy

Progestin therapy

Progestins

- Breast enlargement is the most common reason TG women seek progesterone
- Role in CGHT is unclear
  - Many clinicians do not use progestins for hormonal transition
  - Some clinicians use progestins for only the first six months of transition
  - Some use progestins cyclically (10/28 days) to mimic the biological female cycle
Cross-gender hormone therapy

Progestin therapy

Progestins

- Side effects: weight gain, edema
- Risks: phlebitis, depression, mood swings, androgenic effects
- WHI data on use of conjugated estrogens with progesterone showed an increased risk of DVT, stroke, pulmonary emboli (PE) and myocardial infarction (MI)
Cross-gender hormone therapy

Safety of CGHT Use

Very few published studies of long-term safety of FTM or MTF regimens

2007 retrospective study from Netherlands\textsuperscript{12}

- 30 years follow-up of 2236 MTF and 876 FTM
- MTF: 20-fold increase (6-8\%) in incidence of venous thrombosis on ethinyl estradiol; increase in PRL levels
- FTM: polycythemia is rare; no change in mortality
Cross-gender hormone therapy

Key Points about CGHT

Hormones are:

- Vital to some TG patients’ identities
- Safe
- Effective
- Not complicated to prescribe and monitor
Cross-gender hormone therapy

Key Points about CGHT

Providing hormones will result in:

- Improved mental health of your patients
- Reduced risk behavior related to the acquisition of street hormones
- Strengthen the provider-patient relationship
- Improve adherence to other medical interventions
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Additional Resources

- The Gender Identity Project at The Lesbian, Gay, Bisexual & Transgender Community Center
  www.gaycenter.org/programs/mhss/gip.html
- TransGender Care
  www.transgendercare.com/default.asp
- Transsexual Women’s Resources
  www.annelawrence.com
- Oriel, KA. “Medical Care of Transsexual Patients,” Journal of the Gay and Lesbian Medical Association, Vol 4., No. 4, 2000;
  koriel@fammed.wisc.edu
Additional Resources

- The World Professional Association for Transgender Health Standards Of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People; Seventh Version, 2011
  www.wpath.org/soc.html

- Center of Excellence in Transgender Health
  transhealth.ucsf.edu/

- For Ourselves Reworking Gender Expression FORGE
  www.forge-forward.org
Additional Resources

- Transgender Health Program: Vancouver Coastal Health
  www.vch.ca/transhealth

- Transgender Care
  www.transgendercare.com

- True Selves: Understanding Transsexualism—For Families, Friends, Coworkers, and Helping Professionals, by Mildred L. Brown

- National Center for Transgender Equality
  www.nctequality.org
Additional Resources

- Sylvia Rivera Law Project
  www.srlp.org

- Positive Health Project
  www.positivehealthproject.org

- Trans Health
  www.trans-health.com

- Transgender Health Initiative of New York
  www.transgenderlegal.org/our-work/health/thiny/

- Trans 101: Transgender Law Center
  www.srlp.org/documents/TLC_new_trans_101.htm
Additional Resources

- **Trans Basics**
  www.transfamily.org/trans.htm

- **Transgender Law Center**
  www.transgenderlawcenter.org

- **Medical Therapy and Health Maintenance for Transgender Men: A Guide For Health Care Providers**
  www.nickgorton.org

- **Transgender Care Conference**
  hivinsite.ucsf.edu/InSite?doc=2098.473A