

---

*Primary Care  
for Gender Variant /  
Transgender Patients*

***Carol Williams, FNP  
McDowell Healthcare Clinic***

---

---

# Primary Care for Transgender and Gender Variant Patients

- Definition of Transgender / Gender Variant
  - Barriers to Care
  - Who is transgender
  - Standards of Care
  - Model of Care for Primary Providers
-

# Alexander Goodrum



---

# ***TRANSGENDER***

refers to a person who is born with the genetic traits of one gender but has the internalized identity of another gender

The goal of treatment for transgender people is to improve their *quality of life* by facilitating their transition to a physical state that more closely represents their sense of themselves.

---

# The care we provide

- There is little research to support the medical care we provide to the Transgender / Gender Variant patient.
- We Primarily develop our standards of care from a consensus of experienced providers and experienced patients voicing their needs.
- Research is needed to validate the care we do.

# TERMINOLOGY

- Gender Identity: the sense of one's self as female or male
- Gender Presentation: the expression of gender may or may not correspond to their gender identity. They may present their gender as they believe they are expected to rather than as they would prefer.

# Terminology

- Female to Male (FTM): person changing or has changed their body and has lived as an affirmed male.
- Male to Female (MTF): person changing or has changed their body and lived as an affirmed female.

# Terminology

- Gender Queer: one who does not accept stereotypical gender roles and may choose to live outside expected gender norms. Gender Queer may or may not avail themselves of hormonal or surgical treatments.



# Terminology

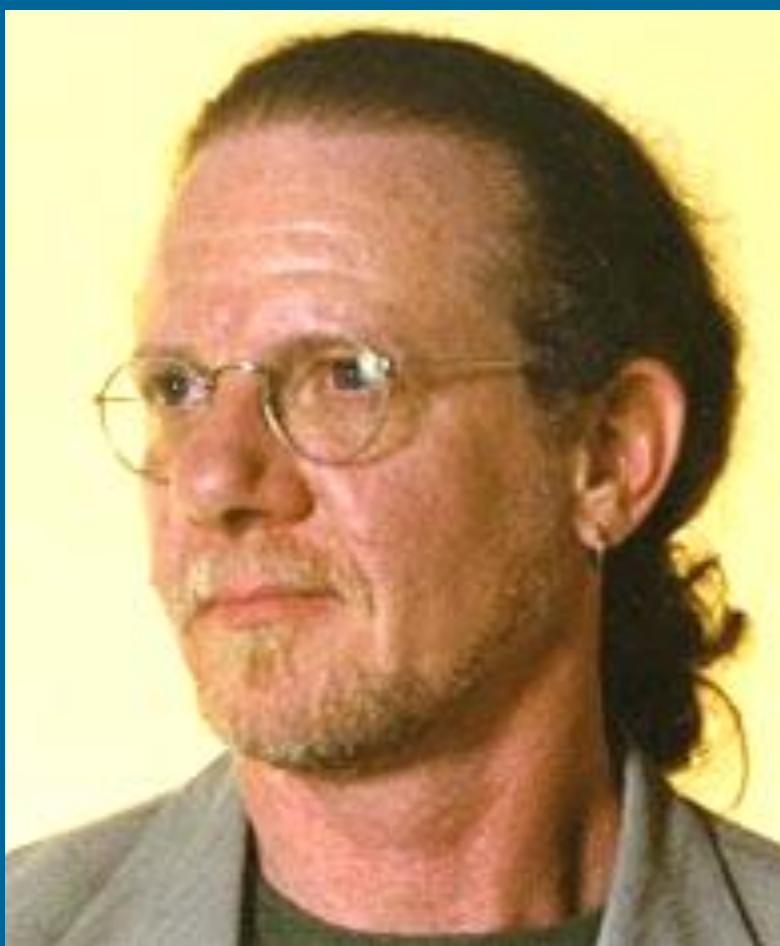
- Transsexual: medical term applied to persons who seek hormonal and / or surgical treatment to modify their body.
- A person is not a transsexual but may be a transsexual person

# Terminology

- Trans: short for a variety of transgender identity. Also trans people or transpeople
- Tranny or Transie: slang for transgender or transsexual. Some patients may be offended by this terminology while others may be comfortable.
- It is advised that providers not use the tranny or transie terminology.

# Terminology

- Transvestite: a term applied to male bodied people who wear female clothing periodically.



---

# Barriers to Medical Care for Transgender patients

- Geographic Isolation
  - Lack of insurance Coverage
  - Stigma of Gender Clinics
  - Lack of clinical research and limited medical literature
  - Lack of understanding by medical personnel
-

---

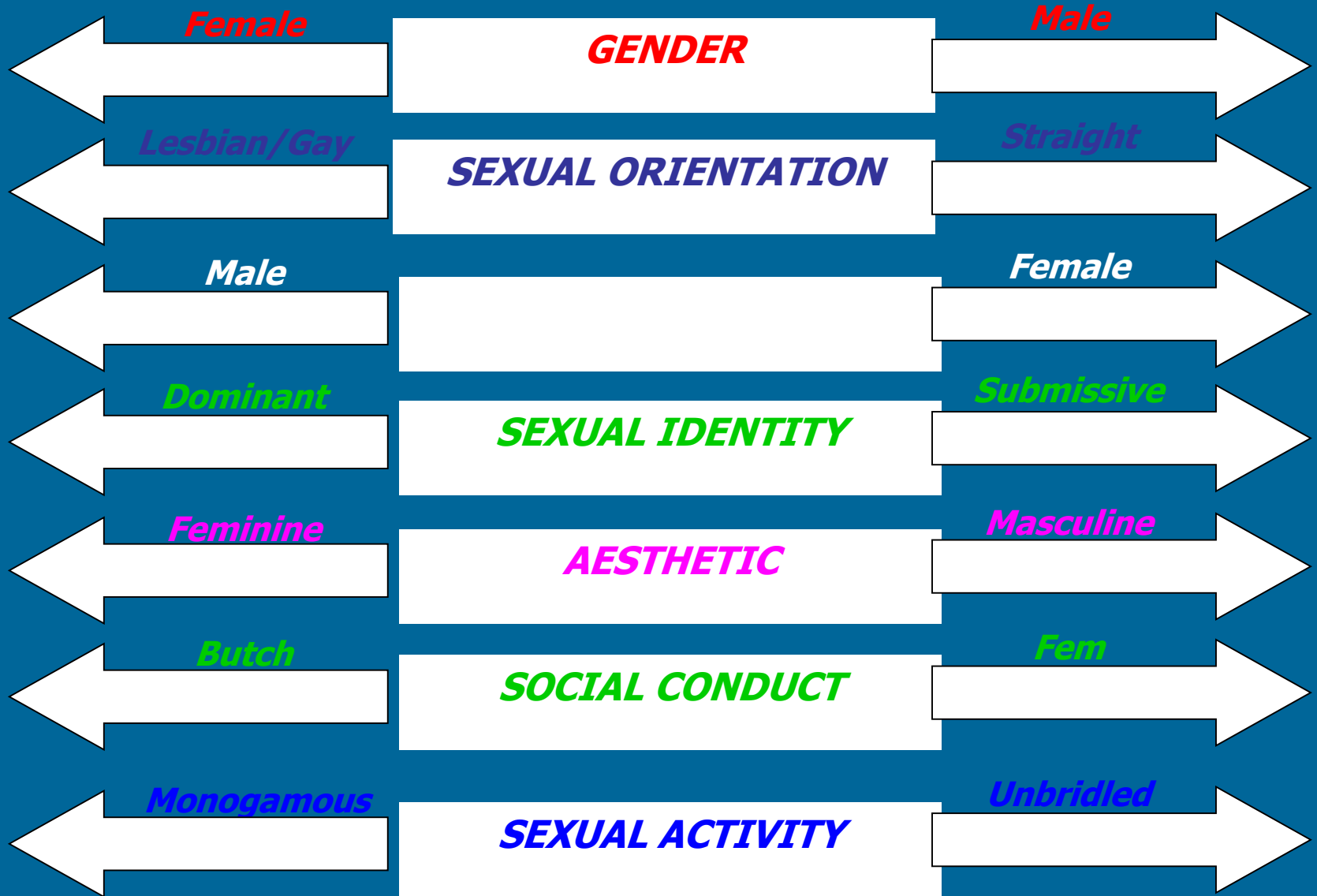
# Gender Identity

- A strong and persistent cross-gender identification
  - Manifested by symptoms such as the desire to be and be treated as the other sex, frequent passing as the other sex, the conviction that he or she has the typical feelings and reactions of the other sex
  - Persistent discomfort with his or her sex or sense of inappropriateness in the gender role
-

---

# (cont)

- The Gender Identification is not concurrent with a physical intersex condition
  - The Gender Identification may cause clinically significant distress or impairment in social, occupational, or other important areas of functioning
-





# Considerations for Hormone Treatment

## Real Life Experience

- Employment, student, volunteer
- New legal gender-appropriate first name
- Documentation that persons other than the therapist know the patient in their new gender role

---

# Readiness Criteria for Hormone Therapy

- Real life experience or psychotherapy further consolidate gender identity
  - Progress has been made toward the elimination of barriers to emotional well being and mental health
  - Hormones are likely to be taken in a responsible manner
-

---

## Hormone Therapy for Incarcerated Persons

- People with GID should continue to receive treatment according to recommendations
  - Prisoners who withdraw rapidly from hormone therapy are at risk for psychiatric symptoms
  - Medical monitoring of hormonal treatment should be done.
  - Housing for transgender prisoners should take into account their transition status and their personal safety
-

# Care Team

- The physician who provides hormonal therapy need not be an endocrinologist but should become well-versed in the relevant medical and psychological aspects of treating persons with gender identity disorders

# Initial Visits

- Review history of gender experience
- Document prior hormone use
- Obtain sexual history
- Review patient goals
- Address safety concerns
- Assess social support system
- Assess readiness for gender transition
- Review risks and benefits of hormone therapy
- Obtain informed consent
- Order screening laboratory studies
- Provide referrals

# Transgender Hormone Therapy

- Heredity limits the tissue response to hormones
- More is not always better



# Body Alchemy

PHYSICAL FORECAST



# Female to Male Treatment Options

- No Hormones

- Depotestosterone

*Testosterone Enanthate or Cypionate*

*100-200 mg IM q 2 wks (22g x 1 ½" needles)*

- Transdermal Testosterone

*Androderm or Teestoderm TTS 2.5-10mg qd*

- Testim Gel

*5 grams q pm*

- Testosterone Pellet

*Testopel- implant 6-10 pellets q month*



## Other Treatment Considerations for FTMs

- Testosterone cream in aquaphor for clitoral enlargement
  - Estrogen vaginal cream for atrophy
  - Progesterone may be considered for areola and libido
  - Hair loss – consider finasteride 1 – 5 mg
-

# Testosterone Therapy Permanent Changes

- Increased facial and body hair
- Deeper voice
- Male pattern baldness
- Clitoral enlargement

# Testosterone Therapy – Reversible Changes

- Cessation of menses
- Increased libido, changes in sexual behavior
- Increased muscle mass / upper body strength
- Redistribution of fat
- Increased sweating / change in body odor
- Weight gain / fluid retention
- Prominence of veins / coarser skin
- Acne
- Mild breast atrophy
- Emotional changes

# Risks of Testosterone Therapy

- Lower HDL
- Elevated triglycerides
- Insulin resistance
- Loss of Fertility
- Hepatotoxicity (rare)
- Polycythemia
- Unknown effects on breast, endometrial, ovarian tissues

## DRUG INTERACTIONS - Testosterone

- Increases the anticoagulant effect of warfarin
- Increases clearance of propranolol
- Increases the hypoglycemic effects of sulfonylureas

# LABORATORY MONITORING FOR FTM PATIENTS ON TESTOSTERONE

- Screening:
    - CBC
    - Liver Enzymes
    - Lipid Profile
    - Renal Panel
    - Fasting Glucose
-

# LABORATORY MONITORING FOR FTM PATIENTS ON TESTOSTERONE

- 3 Months after starting testosterone and every 6-12 months:
  - CBC
  - Liver Enzymes
  - Lipid Profile

# FOLLOW-UP CARE FOR FTM PATIENTS

- Assess patient comfort with transition
- Assess social impact of transition
- Assess masculinization / menses
- Discuss family issues
- Monitor mood cycles
- Counsel regarding sexual activity



# FOLLOW-UP CARE FOR FTM PATIENTS

- Review medication use
- Discuss legal issues / name change
- Review surgical options / plans
- Continue Health Care Maintenance
  - Including PAP smears, SBE, mammograms, STD screening
- Assess CAD risk

# SURGICAL OPTIONS FOR FTMs

- Mastectomy

*Continue BE/SBE on residual tissue*

- Hysterectomy/oophorectomy

- Genital reconstruction

- Phalloplasty



# Male to Female Treatment Options

- No hormones
- Estrogens
  - Premarin 1.25-10mg po qd or divided as bid
  - Ethinyl Estradiol (Estinyl) 0.1-1.0 mg po qd
  - Estradiol Patch 0.1-0.3mg q3-7 days
  - Estradiol Valerate inj. 20-60mg IM q2wks
- Antiandrogen
  - Spironolactone 50-100 mg po bid
- Progesterone
  - Not usually recommended except for weight maintenance

# Estrogen Treatment May Lead To

## ➤ Breast Development

- Redistribution of body fat
- Softening of skin
- Loss of erections
- Testicular atrophy \*\*\*
- Decreased upper body strength
- Slowing or cessation of scalp hair loss

# Risks of Estrogen Therapy

- Venous thrombosis/thromboembolism
- Weight gain
- Decreased libido
- Hypertriglyceridemia
- Drug interactions
- Elevated blood pressure
- Decreased glucose tolerance
- Gallbladder disease
- Benign pituitary prolactinoma
- Breast cancer(?)
- Infertility

# Spironolactone Therapy May Lead To

- Modest breast development
- Softening of facial and body hair

---

# Risks of Spironolactone Therapy

- Hyperkalemia
  - Hypotension
  - Drug Interactions
-





# Women over 40 yo

- Add ASA to regimen
- Transdermal estradiol therapy is recommended to reduce the risk of thromboembolism

# Cosmetic Therapies

- Hydroquinone

topical treatment for pigmentation caused by estrogen therapy

- Hair Removal

Eflornithine cream

Electrolysis

Laser hair removal

# Drug Interaction

- Estradiol, Ethinyl Estradiol, Testosterone levels are ***DECREASED*** by:
  - Lopinavir
  - Nevirapine
  - Ritonavir
  - Nelfinavir
  - Naphthoflavone
  - *Progesterone*
  - Carbamazepine
  - Phenytoin
  - Phenobarbital
  - Rifampin
  - Dexamethasone

# Drug Interactions

- Estradiol, Ethinyl Estradiol, Testosterone levels are ***INCREASED*** by:
  - Nefazodone
  - Fluvoxamine
  - Indinavir
  - Sertraline
  - Diltiazem
  - Cimetidine
  - Itraconazole
  - Fluconazole
  - Clarythromycin
  - Grapefruit
  - Isoniazid
  - Fluoxetine
  - Efavirenz
  - Paroxetine
  - Verapamil
  - Astemizole
  - Ketoconazole
  - Miconazole
  - Erythromycin
  - Triacetyloleandomycin

# Drug Interactions

Estrogen levels are ***DECREASED*** by:

- Smoking cigarettes
- Nelfinavir
- Nevirapine
- Ritonavir

# Drug Interactions

Estrogen levels are ***INCREASED*** by:

- Vitamin C

# Screening Labs for MTF Patients

- CBC
  - Liver Enzymes
  - Lipid Profile
  - Renal Panel
  - Fasting Glucose
  - Testosterone level
  - Prolactin level
-



---

# Follow-up labs for MTF Patients

- Repeat screening labs at 6 months and 12 months after initiation of hormones and annually thereafter
  - Prolactin level annually for 3 years
-

# Follow-Up Care for MTF Patients

- Assess feminization
- Review medication use
- Monitor mood cycles and adjust medication as indicated
- Discuss social impact of transition
- Counsel regarding sexual activity
- Review surgical options
- Complete forms for name change
- Review CAD risk factors
- Continue HCM

# Health Care Maintenance for MTF Patients

- Clinical breast exam
  - Instruction in self breast exam and care
  - Mammography
  - Prostate screening
  - STD screening
  - Beauty tips
-

# Treatment Considerations- MTFs

- Testosterone therapy after castration

Libido

Osteoporosis

General sense of well-being

---



# *HORMONES*

- There is no upper limit for hormone therapy. Trans male patients beginning hormones after the age of 40 will generally progress more slowly to desired results.
- There is no firm contraindications for hormonal treatment with the exception of estrogen or testosterone sensitive cancers.
- There is some considerations for thrombotic disease

## *Older Studies*

- In both MTF and FTM transsexuals, total mortality was not higher than in the general population
- Venous thromboembolism was the major complication in MTF patients treated with oral estrogens
- No serious morbidity was observed that could be related to androgen treatment in FTM patients

# Two Crucial Concepts

- Honor the patient's gender identity and use the pronouns and terminology the patient prefers.
- A transgender patient's body may have elements, traits or characteristics that do not conform to patients gender identity.



# Transpeople

- The anatomy of trans people does not define them, even though that anatomy may require treatments typically provided for persons of the opposite sex. Respect the patient's gender identity and treat the body as if it belongs to them, rather than defines them.

# Principle of Care

- The most important principle to apply in general prevention and screening is to provide care for the anatomy that is present. Always provide that care in a sensitive, respectful and affirming manner that honors the patient's self identification.
- Intake forms, medical forms should ask both current gender identity and their sex assigned at birth.

# FERTILITY

- Discuss the possibility of infertility early on or at the first visit to both transmen and transwomen. Fertility may be affected and may be permanent.
- Discuss the option of cryopreservation



# PREVENTION

- Employment discrimination results in reliance on sex work
- Services available are not accessed due to fear of discrimination
- Unprotected sex provides sexual validation and increases self-esteem

# SEXUAL HISTORY

- Education with a frank discussion about safer sexual practices should be done.
- Provide information about safer sex and condom use. pPrep
- Encourage partners to attend part of clinic visit.

---

# Summary

All Transgender people are medically underserved

Medical treatment is not optional

There are many unanswered questions about long term effects of hormone therapy but the benefits outweigh the risks for most patients

---













# RESOURCES

- ACOG Transgender Health Resource Guide  
[www.acog.org](http://www.acog.org)
- Fenway Health – Transgender Health Training  
[www.fenwayhealth.org](http://www.fenwayhealth.org)
- WPATH Standards of Care  
[www.wpath.org](http://www.wpath.org)
- CDC LGBT Health – [www.cdc.gov/health](http://www.cdc.gov/health)