Providing Transgender Inclusive Healthcare

Ashok Srihari MD
Assistant Professor of Medicine
Division of Endocrinology
University of Florida College of Medicine



Learning Objectives

- 1. Describe the overlap with HIV and transgender patients
- 2. Understand when to initiate gender affirming hormone therapy
- Identify risks of hormone therapy
- 4. Recall online trans health resources



I have no disclosures to report



North Florida/South Georgia Veterans Health System

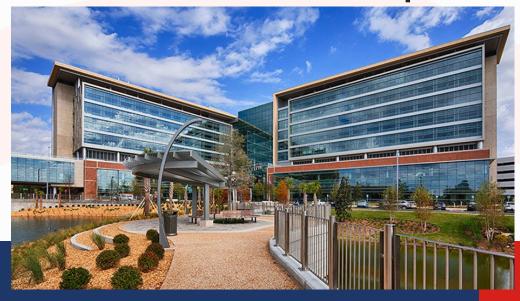


The VA North Florida/South Georgia

- Largest VA health care system in the country, with two hospitals, nine clinics
 40,000 sq miles
- •2020 served 139,840 Veterans and completed 1.9 million outpatient visits.

	FY 2017	25,866	
Gainesville	FY 2018	34	4,448
	FY 2019		35,048
	FY 2020		37,251

UF Health Shands Hospital





VA Sunshine Healthcare Network – VISN 8



305-575-7000 • 888-276-1785 www.miami.va.gov

C.W. Bill Young VA Medical Center 10000 Bay Pines Blvd. Bay Pines, FL 33744 727-398-6661 • 888-820-0230 www.baypines.va.gov

James A. Haley Veterans' Hospital 13000 Bruce B. Downs Blvd. Tampa, FL 33612 813-972-2000 • 888-716-7787 www.tampa.va.gov

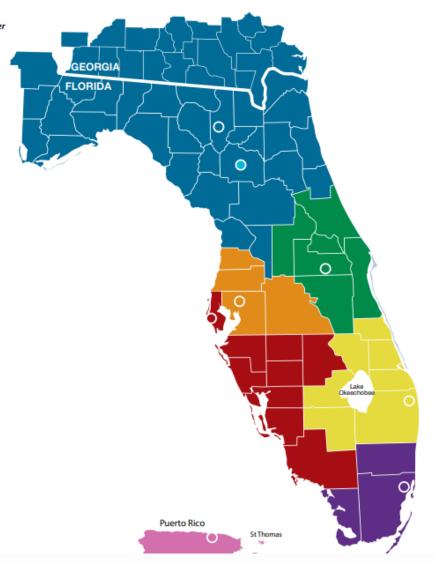
Lake City VA Medical Center 619 South Marion Avenue Lake City, FL 32025 386-755-3016 • 800-308-8387 www.northflorida.va.gov

Malcom Randall VA Medical Center 1601 SW Archer Road Gainesville, FL 32608 352-376-1611 • 800-324-8387 www.northflorida.va.qov

Orlando VA Healthcare System 13800 Veterans Way Orlando, FL 32827 407-631-1000 • 800-922-7521 www.orlando.va.gov

West Palm Beach VA Medical Center 7305 North Military Trail West Palm Beach, FL 33410 561-422-8262 • 800-972-8262 www.westpalmbeach.va.gov

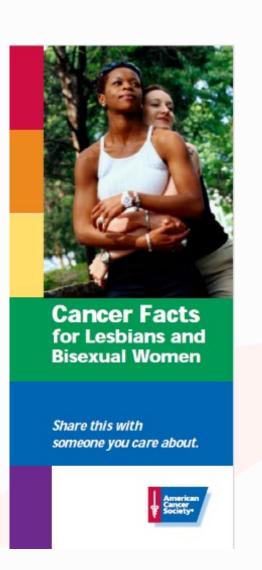
VA Caribbean Healthcare System 10 Casia Street San Juan, Puerto Rico 00921 787-641-7582 • 800-449-8729 www.caribbean.va.gov

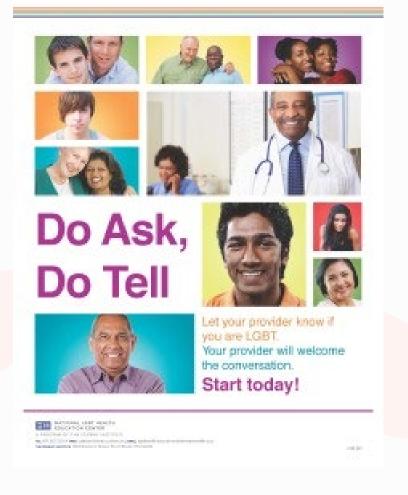




Do patients see themselves in your clinic?

- Inclusive brochures/signage
- Inclusive intake forms
- Pictures on walls
- Diverse staff







- High prevalence of HIV in Transgender individuals
 - 14% trans women
 - 44% of black trans women

Gender affirming, trans competent care is an opportunity

Becasen JS, Denard CL, Mullins MM, et al. Estimating the prevalence of HIV and sexual behaviors among the US transgender population: a systematic review and meta-analysis, 2006–2017. Am J Public Health 2018

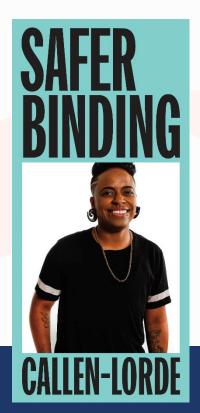


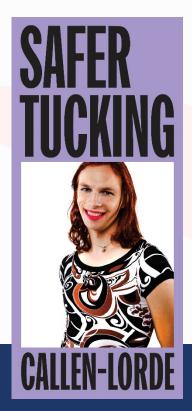
Provide Gender Affirming Care

- Social/Emotional Affirmation
 - Name and pronouns
 - Dress, Binding, Tucking, Packing, Padding
 - Coming out
- Medical affirmation
 - Hormones
 - Hair removal
 - Voice Therapy
 - Surgery
- Legal affirmation
 - Identity documents

"I would like to offer a new lens, one that casts gender non-conformity in a positive light, in order not to squelch it but facilitate it"

-Diane Ehrensaft PhD











DEPARTMENT OF VETERANS AFFAIRS NORTH FLORIDA/SOUTH GEORGIA VETERANS HEALTH CARE SYSTEM Malcom Randall VA Medical Center 1601 S.W. Archer Road Gainesville, Florida 32608 (352) 548-6000

Jan 16, 2022

I, Ashok Srihari, MD, State of Florida Medical license #ME 133002, am the physician of _____

(formerly known as _____) with whom I have a doctor/patient relationship and whom I have treated. ___has had appropriate clinical treatment for gender transition to the new FEMALE gender.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Thank you in advance for treating my patient with dignity and respect.

Signature of Physician

Notary signature/stamp

Typed Name of Physician

Ashok K Srihari

te



Starting Gender
Affirming
Hormone Therapy

Diagnosing Gender Dysphoria

DSM-V Criteria

- Incongruence between experienced gender and natal gender x
 6 months
- Defined by strong desires for characteristics of the other gender

WPATH Criteria for Gender-Affirming Hormone therapy

- Persistent, well documented GD/gender incongruence
- Age of majority in a given country
- Mental health concerns must be reasonably well controlled



Ensure that criteria for GD are met

2017 Endocrine Society Guidelines

 Evaluate and address any medical conditions that might be exacerbated

Agree to a monitoring schedule

 Educate on the onset of time course of physical changes



Letter Model

"Clearance to begin hormone therapy"

- May be appropriate at times:
 - Gender Affirming Surgery
 - Minors
 - Clinicians who may be unfamiliar



Informed Consent vs "Letter" Model

- Acknowledges personal autonomy
- Clinician assists in decision making
- Allows for Mental Health support as
- Allows patients to be more truthful



Physician is not a gatekeeper but rather an advocate



Ideal patient

Has experience with new GI
Adequate social support
Good medical adherence
Mental health concerns reasonably well controlled

Has realistic expectations of treatment Understand risks/benefits



Concerning Patient

- Psychiatric admissions
- Smoking
- Established CVD or VTE history
- Low likelihood of follow up
- Difficult Social situation
- Desire to transition of <6 months



Concerning Patient

Enhancing readiness

Specific action items

- Smoking cessation
- Establish with mental health

Gender affirming hormone therapy is a **medically necessary** treatment of gender dysphoria. Contraindications are relative



Initiating Hormone therapy

- What are realistic expectations of treatment
- What are the risks



Transgender Male (F to M)

Table 12. Masculinizing Effects in Transgender Males

Effect	Onset	Maximum
Skin oiliness/acne	1–6 mo	1–2 y
Facial/body hair growth	6–12 mo	4–5 y
Scalp hair loss	6–12 mo	a*
Increased muscle mass/strength	6–12 mo	2–5 y
Fat redistribution	1–6 mo	2–5 _{,b} y
Cessation of menses	1–6 mo	ь
Clitoral enlargement	1–6 mo	1–2 y
Vaginal atrophy	1–6 mo	1–2 y
Deepening of voice	6–12 mo	1–2 y

Transgender Female (M to F)

Table 13. Feminizing Effects in Transgender Females

Effect	Onset	Maximum
Redistribution of body fat	3-6 mo	2-3 y
Decrease in muscle mass and strength	3-6 mo	1-2 y
Softening of skin/decreased oiliness	3-6 mo	Unknown
Decreased sexual desire	1-3 mo	3-6 mo
Decreased spontaneous erections	1-3 mo	3-6 mo
Male sexual dysfunction	Variable	Variable
Breast growth	3-6 mo	2-3 y
Decreased testicular volume	3-6 mo	2-3 y
Decreased sperm production	Unknown	>3 y
Decreased terminal hair growth	6-12 mo	>3 y ^a
Scalp hair	Variable	b
Voice changes	None	c



Equal Access Gender Affirming Therapy: Masculinizing (FtM)

Developed by Catherine Bielick, 2017-2018 Olinic Director, updated 2021 by Monica Rodriguez, LGBT Officer

Initial evaluation in clinic

Informed consent process started

Patient obtains baseline labs

Begin HRT after discussion of risks and benefits Reevaluation at
3 months
(with labs prior)

Reevaluation at 6 months (with labs prior) Reevaluation at 12 months (with labs prior)

Initial Evaluation

- Baseline history and counseling
 - Mood status (PHQ-9, GAD6, Mood Disorder Questionnaire)
 - Suicidal ideation
 - Smoking status & other VTE/hypercoagulable risk factors
 - Desire for fertility counsel on fertility options
- Set expectations for what changes to expect from GAT (reference)
 - Skin oiliness; 1-6 months; 1-2 years
 - Facial/body hair growth; 3-6 months; 3-5 years
 - Scalp hair loss; >12 months; variable
 - Increased muscle mass/strength; 6-12 months; 2-5 years
 - Body fat redistribution; 3-6 months; 2-5 years
 - · Cessation of menses; 2-6 months; n/a
 - · Clitoral enlargement; 3-6 months; 1-2 years
 - Vaginal atrophy; 3-6 months; 1-2 years
 - Deepened voice 3-12 months; 1-2 years
- Absolute Contraindications: any active testosterone-sensitive cancer
- · Complete Informed Consent Form & Upload to patient chart
- · Enroll patient in Gender Affirming Therapy in the Clinic Navigator



Therapeutic Options

Testosterone Cypionate IM or SQ:

- Initial 50 mg/wk; Max 100 mg/wk
- •Can double each dose for q 2-week dosing Others (for reference)
- Testosterone Enthanate IM or SQ: Initial 50 mg/wk; Max 100 mg/wk
- Testosterone topical gel 1%: Initial 50 mg qAM; Max 100 mg qAM
- Testosterone topical gel 1.62%: 40.5-60.75mg qAM; Max 103.25mg qAM
- Testosterone Patch: Initial 4 mg qPM; Max 8 mg qPM
- Testosterone cream: initial 50 mg, Max 100 mg
- Testosterone Axillary gel 2%: Initial 60 mg qAM; Max 90-120 mg qAM
- Testosterone Udecanoate: Initial 750 IM repeat in 4 weeks, q 10 weeks

Testosterone Treatment Risks

Erythrocytosis/polycythemia

- •Use reference male range
- Management of polycythemia
- 1)Check testosterone levels, including peak levels adjust dose
- 2)More frequent injection schedule with lower peak dose may lower risk [59]
- 3) Phlebotomy or blood donation short term solution
- 4)Rule out pathologic causes of polycythemia (OSA, tobacco, etc)

Hair Loss

Fronto-temporal pattern, severity based on genetics

Management

- OTC Minoxidil (Rogaine)
- 5-alpha reductase inhibitors (finasteride/dutasteride)
- Surgical approaches scalp advancement, hair transplantation

Acne

- Peaks in first year of testosterone therapy then declines
- Treat as normal with topical skin treatments escalating with severity

Weight gain

 Must use with caution and informed consent with PCOS, obese, or hyperlipidemic patients

Life

Labs Baseline & Prior to Every Visit

- CBC without diff (Hg and Hct for erythropoietic effect)
- CMP
- Serum Estradiol (not total estradiol)
- Serum Total Testosterone LC/MS/MS
- Pregnancy Test (always at baseline, follow up if pregnancy is possible)
- No evidence to support extra monitoring lipids, AIC/glucose, cholesterol

Goals

 Titrate GAT dosing to the physiologic range of nontransgender individual of identified gender

(levels vary by lab – Quest lab ranges listed)

Physiologic range of non-transgender males ≥18yo

- Total Testosterone = 400-700 ng/dL (test code 15983)
- Serum Estradiol = can vary greatly not great priority
 - Only 29% of 31 trans men achieved physiologic male-range estradiol levels

Health Maintenance

Pap smears: follow USPSTF, likely behind, based on age

- Can be traumatizing "checkitoutguys.ca" is good patient resources for FTM's
- MUCH higher rate of inadequate cytologic sampling (possibly due to rushing procedure from patient discomfort)[31]
- Can pre-medicate with vaginal estrogens 1-2 weeks prior to exam to decrease vaginal atrophy due to testosterone therapy
- If still refuses offer external OR bimanual as initial step towards establishing trust



Gender Affirming Therapy: Feminizing (MtF)

Developed by Catherine Bieldk, 2017-2018 Clinic Director, updated 2021 by Monica Rodriguez, LGBT Officer

Initial

Informed Consent process

Patient obtains baseline labs

Begin HRT after

discussion of risks and

Initial Evaluation

- Baseline history and counseling
 - Mood status (PHQ-9, GAD6, Mood Disorder Questionnaire)
 - Suicidal ideation
 - Smoking status & other VTE/hypercoagulable risk factors
 - Desire for fertility counsel on fertility options
- Set expectations for what changes to expect from GAT (reference)
 - Body fat redistribution; 3-6 months; 2-5 years
 - Decreased muscle mass/strength; 3-6 months; 1-2 years
 - Softening of skin/decreased oiliness; 3-6 months; unknown
 - Decreased libido; 1-3 months; 3-6 months
 - Decreased spontaneous erections: 1-3 months: 3-6 months
 - Male sexual dysfunction; variable; variable
 - Breast Growth; 3-6 months; 2-3 years
 - Decreased testicular volume; 3-6 months; 2-3 years
 - Decreased sperm production; variable; variable
 - Thinning and slowed growth of body and facial hair; 6-12 months; >3 vears
 - Male pattern baldness; no regrowth, loss tops 1-3 months; 1-2 years
- Absolute Contraindications: any active estrogen-sensitive cancer
- Complete Informed Consent Form & Upload to patient chart
- Enroll patient in Gender Affirming Therapy in the Clinic Navigator

Reevaluation at 3 months (with labs prior)

Reevaluation at 6 months (with labs prior)

12 months (with labs prior)

Therapeutic Options

Estrogen – administer FIRST [36]

- Bioidentical Estradiol Oral/Sublingual (most typical)
 - Initial: 2-4 mg/day
 - Maximum: 8 mg/day (BID dosing if >2 mg daily)

Others:

- Estradiol Transdermal (lower or absent clotting risk [35])
- Initial 100 mcg per [timing brand/product-dependent]
- Maximum 100-400 mcg per timing brand/product
- Estradiol valerate IM: Initial 20 mg IM g 2wk; Max 40mg IM q 2wk
- Estradiol cypionate IM: Initial 2 mg IM g 2wk; Max 5 mg IM
- Note: Conjugated equine estrogens (Premarin) are no longer recommended due to high risk of thrombogenicity and cardiovascular risk [38,39]

Androgen Blocker – Administer SECOND [32,36] – Spironolactone: Initial: 50 mg BID, Max: 200 mg BID

- Optional Adjuncts (for reference)
- Finasteride 1-5 mg/day depending on desiredeffect
- Dutasteride 0.5 mg/day
- Progestagen
 - Micronized progesterone 100-200 mg/night
 - Medroxyprogesterone acetate (Provera), less preferred
 - Initial 2.5 mg/night: Max 10 mg/night

Estrogen Treatment Risks

Venous Thromboembolism

- VTE background rate in general pop: (1/1,000-1/10,000)
- Data on risk of oral 17-Beta estradiol (bioidentical) is MIXED - Some = no increased risk [49]
 - Some = 2.5-4 fold increase in relative risk (still low absolute risk) [50,51]
- Often quoted study: [52,53] Found 20-40-fold times risk of VTE in transgender women, BUT:
 - 1) high doses (100-200 mcg/day)
 - 2) thrombogenic ethinyl estradiol(conjugated)
 - 3) Mix of smokers and non-smokers in cohort
- Routine hypercoagulability screening is not recommended
- Withhold estrogen therapy when: 1) patients with significant risk factors/history of VTE and 2) who continue to smoke tobacco
- If risks are great, but manageable—consider transdermal estrogen application

Loss of erectile function

- Some do not lose, can be safely preserved with Viagra or Cialis Libido loss
- 22% met criteria for Hypoactive Sexual Desire Disorder (HSDD), no correlation with testosterone levels [59]
- Mental health therapy continue throughout treatment to help with body image issues and dissociative symptoms

Prolactinoma [56]

- Few case reports reporting association with estrogen therapy
 - Prolactin levels should only be checked in cases of Visual disturbance. Excessive galactorrhea. New onset headaches

Migraine

- Estrogen known association with menstrual migraines (by period cycle in non-transgender women)
- May be exacerbated with feminizing GAT

Infertility

Sperm cryopreservation may be required

Labs Baseline & Prior to Every Visit

- Serum Estradiol (NOT TOTAL estradiol)
- Serum TOTAL testosterone LC/MS/MS

(free testosterone is unreliable [33]) CMP

Goals: Titrate GAT dosing to the physiologic range of nontransgender individual of identified gender

(levels vary by lab – Quest lab ranges listed)

- Physiologic range of mid-cycle non-transgender female
 - Estradiol = 64-357 pg/mL (test code 4021 can google to order)
 - Total Testosterone = 2-45 ng/dL (test code 15983)

No evidence to support extra monitoring: lipids, A1c/glucose, cholesterol

Other Health Concerns

Prostate Exams: follow current guidelines, prostatic atrophy may be severe if on finasteride

Hernias: If pre-operative SRS – MUST monitor – tucking genitals can cause hernias or perineal skin breakdown

If post-operative SRS and needs vaginal exam - NO cervix or fornices – pap smears unnecessary (/impossible)

Visualization of tissue may be better with an anoscope (if necessary, EAC would need WeCarereferral)

Female to Male

Testosterone

Male to Female

- Block Testosterone
- Estrogen



Adverse Effects to Consider

Trans Woman (Male to Female)

VTE

CAD

CVA

Osteoporosis

Hyperkalemia

Hypertriglyceridemia

Breast Cancer



Transgender Female

Why We AVOID Certain Estrogens

AVOID conjugated equine estrogens.

o E.g., Premarin, Menest.

AVOID ethinyl estradiol.

- E.g., contraceptive products.
- Increased thromboembolic risk as demonstrated in cisgender and transgender populations.
- Unable to monitor estradiol concentrations.
- No advantage over natively produced estradiol.



VTE Risk in Trans Females

Cohort Study

- 2842 Transgender females
- 2118 Transgender men

Matched with

- ~50,000 cisgender women and 50,000 cisgender men
- Kaiser Permanente sites in Georgia and California

On Estrogen prior or started during a 4 year period



VTE Risk in Trans Females

~5000 Transgender individuals compared to Cisgender cohort

Matched to:

- Age, Race, Smoking status, BMI, Cholesterol, BP, Prior ASCVE

Trans Woman (M→F)

- VTE → ~3 fold increase compared to cis male
- -Ischemic CVA → ~2 fold increase compared to cis male
- MI → No increase



Risks in Trans Men

- Modest increase in VTE risk
- Modest increase in CVA risk
- No increase in MI risk

Pregnancy



Adverse Effects to Consider

Trans Man (Female to Male)

Erythrocytosis

Acne

CAD

Transaminitis

CVA

HTN

Breast/Uterine Ca



Transgender Male (F→M)

Similar to treatment of cis gender hypogonadal men

Small weekly doses of IM Testosterone

Subcutaneous Testosterone is equally effective



"We strongly believe that the benefits of medical and surgical gender affirmation are beyond dispute, as do the study advisors (both clinicians and members of the transgender community) who provided input on all aspects of this research. At the same time, no therapy is free of risks and these risks need to be ascertained, quantified, and explained"

Adjunctive therapies

- Trans Women:
 - Progesterone
 - Finasteride
 - •GNRH agonists

- Trans Men
 - Finasteride
 - DHT



Adjunctive Therapies

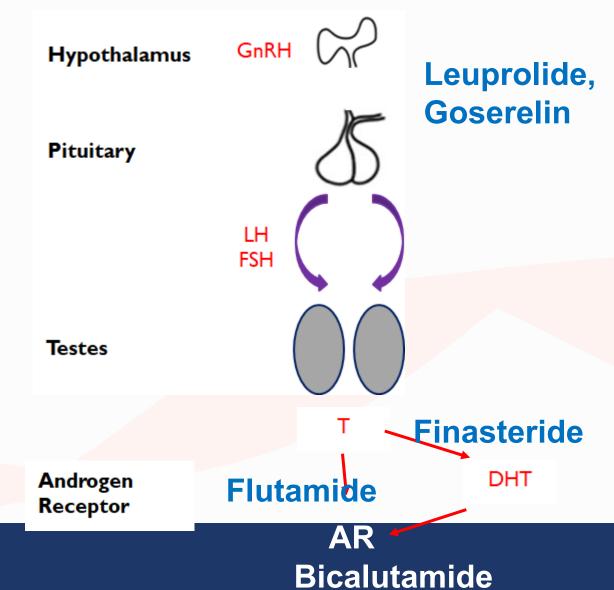
Progesterone

- anecdotally improved breast growth, mood
- Additional suppression of FSH/LH → testosterone suppression
- Micronized Progesterone (Prometrium) safest
- Safety concerns: VTE, Malignancy
- Strong opinions. Not recommended by Endo Society, while it is recommended by WPATH and UCSF Transgender institute

Adjunctive Therapies

- Finasteride
 - 5 alpha reductase inhibitor
- Blocks Testosterone → DHT
 - Particularly to reduce hair growth
 - Concern about Psychiatric effects
- In fact may be more uses in Transgender Men to prevent hair loss

Adjunctive Therapies





Case

- 22y/o transmasculine person presents for assistance with cross sex hormone therapy. He is a well adjusted college senior with sx of gender incongruence since age 13 when he went through puberty. No significant PMHx or FHx. He is a nonsmoker, not sexually active. He is uninterested in biological children and is applying to graduate school. His pap smear was completed in the past year. He would like to change his name after graduation.
- Vital signs are within normal limits, physical exam is unremarkable except for his use of a chest binder. He weighs 60kg.



Assessment: 22y/o trans male with well documented Gender dysphoria who is a good candidate for cross sex hormone therapy

- Informed consent for testosterone therapy
- Obtain baseline labs
- Print out of local resources
- Return to clinic in 2 weeks for testosterone initiation and nurse visit



- Testosterone cypionate 200mg/ml
 - Start 0.15 ml 0.2 ml weekly (30-40mg)
 - Can be given subQ or IM
 - Repeat labs in 3 months midway between injections
 - Titrate to target testosterone level of 400-700ng/dl
 - Follow total testosterone, CBC, CMP, Lipids, HCG q3 month for first year



51 y/o trans female with PMHx of depression, remote history of suicidal attempt, CAD s/p PCI, Tobacco abuse who has identified as female for the past 10 years is referred for cross sex hormone therapy.

She takes all medication as prescribed and presents today dressed in female clothing and accompanied by her longtime cis-female partner



Assessment:

51y/o trans female with well documented gender dysphoria with concerning medical history and at risk for complication from cross sex hormone therapy with estrogen.

- Informed consent regarding risks of estrogen, adverse cardiac event,
 VTE and importance of smoking cessation
- Obtain baseline labs and agree to start therapy in 3 months if she can quit smoking.
- Ask for a recent mental health evaluation



- She has successfully quit smoking. Her BP, A1c, Lipid panel are all acceptable on therapy.
- Start Estradiol patch 0.05mg/d patch
- Start Spironolactone 50mg BID
- Check Total Testosterone, Estradiol, CMP (in particular K+) in 3 months.
- Target Testosterone: <50ng/dl</p>
- Target Estradiol: 50-250 pg/ml



Summary

- Gender Dysphoria is a common medical condition for which the primary medical treatment is gender affirming hormone therapy
- Once therapy is initiated, hormone regimens are fairly straight forward

Primary concern is with estrogen use in high risk transgender females



Who should manage transgender patients?

Cardiovascular health

Mental Health

Bone Health

Primary Care Endocrinology

HIV Prevention/Sexual Health

Fertility/Reproductive Health

Cancer Screening



Current events

- Awareness is important
- Reassure patients

- Athletics
- Pediatric care
- Medicaid coverage



Online Resources







CONFERENCES EDUCATION RESOURCES PUBLICATIONS MEMBERSHIP NEWSROOM DONATE

login | register







HIV Care

- Most drugs don't interact with genderaffirming hormones
- Require closer hormone monitoring
- Drugs most like to interact:
- Etravirine
- Nevirapine
- Elvitegravir (+/- cobicistat or ritonavir)
- Protease inhibitors (+ cobicistat or ritonavir)

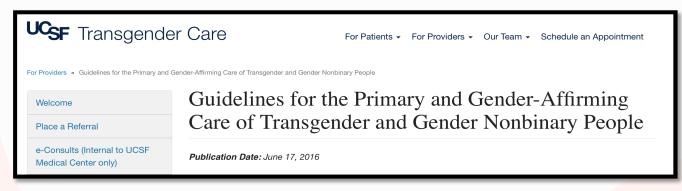


HIV Care

- Very low uptake in PrEP usage in transgender community
- Transgender patients not included in research protocols
- Lack of engagement in continuum of care, missed screening opportunities
- Perceived interaction with hormone therapy









Online Resources



Practice Cultural Humility



"Proposes change through a lifelong process of learning, including self-examination and refinement of one's own awareness, knowledge, behavior and attitudes on the interplay of power, privilege and social contexts"

How can you make your practice/health system more inclusive to transgender patients?



Thank you and Questions!

ashok.srihari@medicine.ufl.edu

