



ADVANCING EXCELLENCE IN TRANSGENDER HEALTH

# Transgender Health: Primary Care and Preventative Health

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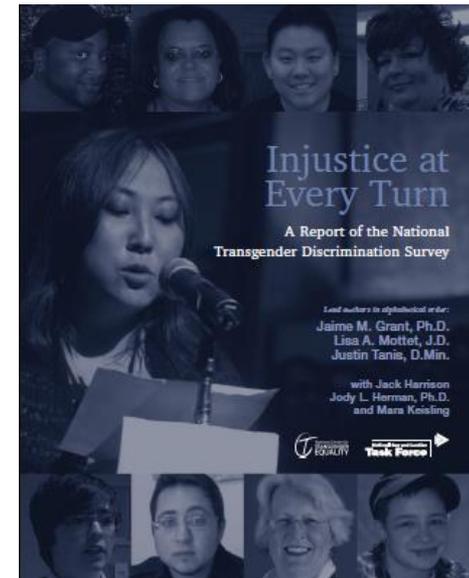
September 21<sup>st</sup>, 2018

# Objectives

1. Identify issues of morbidity, mortality, as well as ... areas of Resilience!
2. Discuss benefits to an integrated approach to trans health
3. Review of Primary Care Recommendations

# BARRIERS TO MEDICAL CARE FOR TRANSGENDER PATIENTS

- Economically disadvantaged
- Geographic and social isolation
- Lack of insurance coverage
- Lack of provider training and competence
- Lack of provider confidence or support: limited clinical research and data
- Stigma of Gender Clinics



# MORBIDITY AND MORTALITY IN THE TRANSGENDER COMMUNITY

European Journal of Endocrinology (2011) 164 635–642

ISSN 0804-4643

CLINICAL STUDY

## **A long-term follow-up study of mortality in transsexuals receiving treatment with cross-sex hormones**

Henk Asscheman<sup>1</sup>, Erik J Giltay<sup>3</sup>, Jos A J Megens<sup>2</sup>, W (Pim) de Ronde<sup>1</sup>, Michael A A van Trotsenburg<sup>2</sup> and Louis J G Gooren<sup>1</sup>

- Significant increase in mortality is seen amongst transgender individuals compared to the general population

  - 51% higher mortality rate in **MTF** patients

- Most of the increase in mortality was due to higher rates of **AIDS, suicide, drug-related deaths**



# RESILIENCE



- Determine individual strengths!
  - What is important
  - What are priorities

- **The power of shared knowledge and experience**

- - Community mentorship / chosen family
- - Trust
- - Community lore



# PRIMARY CARE

- Increasing access
  - Caregiver need not be an endocrinologist
- Increasing comprehensive care
  - Goal of care is to facilitate affirmation and alleviate gender dysphoria
  - Address general health concerns!
    - Promote and ensure physical health and emotional and social well-being



# TAKING A HISTORY

- Same as for all patients, but pay specific attention to health disparities
- Be aware of contexts that increase health risks
  - What are risk factors for smoking, substance use, or engaging in sexual risk behaviors? What is the incidence of trauma/ abuse in this population?
- Ask about gender identity and pronouns ... **ALL** patients! (**AND** their partners!)
- Ask about social support; be aware of possible rejection by family or community of origin, harassment, and discrimination
- Ask about use of gender affirming hormones, gender affirmation surgeries, and use of silicone



# PREVENTIVE HEALTH AND PRIMARY CARE

- Treat the anatomy that is present:
- **If you have it, check it!**
  
- Clinical care should be based on an up-to-date anatomical inventory:
  - Breasts
  - Cervix
  - Ovaries
  - Penis
  - Prostate
  - Testes
  - Uterus
  - Vagina



# PREVENTIVE HEALTH TRANSMASCULINE INDIVIDUALS



# HEALTH MAINTENANCE IN TRANSMASCULINE INDIVIDUALS

## ■ Pap smears

- As per natal females
- Testosterone can cause atrophy of the cervical epithelium mimicking dysplasia
- Increase in “unsatisfactory” samples seen: 10.8% (10 times higher than in non-trans women) (Peitzmeier, 2014. J Gen Intern Med)
- Transmasculine indiv found to have reduced screening rates and longer latency to follow-up testing (Peitzmeier, 2014. Am J Prev Med)

## ■ Recommendations:

- Make note on lab acquisition form that patient is on testosterone and amenorrheic
- Talk to patients about possibility of abnormal or unsatisfactory paps BEFORE the exam
- Review importance of followup and how to decrease barriers of
- \* Cervical cancer screening should never be a requirement for testosterone therapy



# HEALTH MAINTENANCE IN TRANSMASCULINE INDIVIDUALS

## Pap Test

### •Customize the pap test

- **Provide Options:**
  - bring support person
  - ask for a chaperone
  - partially undress
  - pediatric spectrum
  - topical anesthetic
  - water-based lube
  - consider low dose anxiety med

### •Gender Affirming Communication

- **Avoid:**
  - gendered language (women's/GYN exam, vaginal exam, reproductive health)
  - female anatomical terms

- **Focus on:**
  - Gender neutral language
  - masculine identity
  - professional language
  - body position on table; frog legs vs stirrups

### •Provider confidence in trans competence

- **Emphasize:**
  - provider has experience in trans care
  - Patient strategies for exercising control of exam



# HEALTH MAINTENANCE IN TRANSMASCULINE INDIVIDUALS

## ▪ Endometrial hyperplasia

- Futterweit, et al (1986): 9/19 (63%) FtM patients had proliferative endometrium at the time of hysterectomy; 3/19 (18%) had mild endometrial hyperplasia. 37% had inactive endometrium.
- Perrone, et al (2009): 27 FtM undergoing endometrial bx; all had atrophic endometrium similar to post-menopausal controls vs pre-menopausal controls
- Grynberg, et al (2010): 112 FtM given androgen for at least 6mo prior to THSO - endometrial atrophy in 45%
- Loverro, et al (2016): 12 indiv of reproductive age, on injectable T. 10 with mildly active endometrium and 2 with secretive endometrium. Increased incidence of fibroids, myometrial hypertrophy, and fibrosis could be related to increased androgen receptor expression after prolonged T use



# HEALTH MAINTENANCE IN TRANSMASCULINE INDIVIDUALS

- **Endometrial hyperplasia (cont.)**

- No increased incidence of endometrial cancer than the general population

Urban, Teng & Kapp (2011): First case report of endometrial carcinoma in an FtM patient after 7 years on testosterone treatment

- Recommendations:

- Hysterectomy for 1° prevention of endometrial cancer is NOT currently recommended
- Routine screening for endometrial cancer in transmen with ultrasound is not evidenced based and unrealistic
  - Expense
  - Tolerability
- **Unexplained bleeding needs to be explored** and patients should to inform their providers when this occurs



# HEALTH MAINTENANCE IN TRANSMASCULINE INDIVIDUALS

## ▪ Pelvic Pain and Abnormal Uterine Bleeding

### ▪ \*Acute:

- Estrogen-deficient atrophic changes vs infectious
- Testosterone Dose, administration, frequency
- Depression, trauma history, PTSD

### ▪ \*Chronic/Persistent:

- Cessation of menses expected within 6mo - combo of T inducing suppression of ovulation and endometrial atrophy
- Musculoskeletal disorders - genotypic female skeleton and increased muscle mass
- Body habitus; eg. increased aromatization in obese indiv
- Structural - Endometrial polyps, adenomyosis, leiomyomata, endometrial hyperplasia, malignancy
- Adhesions from prior surgeries/post-surgical sequelae
- Non-structural - pregnancy, coagulopathy, ovulatory dysfunction



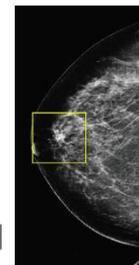
# HEALTH MAINTENANCE IN TRANSMASCULINE INDIVIDUALS

## ▪Mammograms and CBE

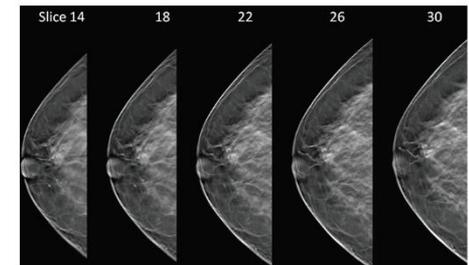
- 2013, 2015 Gooren (Dutch cohort): Total of 7 reported cases of breast cancer in FtM cohort – 5.9/100,000 incidence
- 2015 Brown (US VA system): 7 cases in transmasculine individuals, but with incidence still less than the non-trans general population data (4.3/100,000 VHA yrs)
  - Expected incidence of breast cancer for cis-men is 1.2/100,000
- 2009 Grynberg, et al: 100 mastectomies in transmen after avg of 3.7 years on T.
  - 93% with decreased glandular tissue and increased fibrous connective tissue

## ▪Recommendations:

- As per natal females if no chest reconstruction
- If post-op – no reliable evidence exists to guide screening recommendations
  - yearly chest exams?



2D image



3D image slices



# HEALTH MAINTENANCE IN TRANSMASCULINE INDIVIDUALS

## ▪ Bone density screening

- T appears to be overall protective: Larger cortical bone size after just 1yr, and most studies show preservation of trabecular bone (Van Caenegan 2015, Dan Broulik 2018)
  - Increased muscle mass / mechanical loading
  - Role of aromatization of T to estrogen

## ▪ Recommendations:

- Insufficient evidence to guide recommendations. *Consider >65 yrs old, or post-gonadectomy and off hormone therapy >5yrs*
  - Measuring LH levels: LH is inversely proportional to bone density measures – may be a marker for adequate levels of testosterone to preserve bone mass (Ruetsche, 2005)



# HEALTH MAINTENANCE IN TRANSMASCULINE INDIVIDUALS

## ■ Contraception

- Testosterone does not reliably prevent ovulation
- Consider LARCs without estrogen
  - Mirena IUD
  - Nexplanon
  - Depo-Provera



reproductive  
health  
access  
project

<https://www.reproductiveaccess.org/wp-content/uploads/2018/06/bc-across-gender-spectrum.pdf>



ADVANCING EXCELLENCE IN TRANSGENDER HEALTH CARE

## BIRTH CONTROL ACROSS THE GENDER SPECTRUM

### CAN YOU GET PREGNANT?

If you have a uterus and ovaries, you can get pregnant. This is true even if you take testosterone. Although it may stop your monthly bleeding, testosterone does not keep you from getting pregnant.

### CAN YOU GET SOMEONE PREGNANT?

If you have a penis and testes, you can get someone pregnant. This is true even if you take estrogen. Estrogen may lower your sperm count, but it does not keep you from getting someone pregnant.

### BIRTH CONTROL FOR PEOPLE TAKING TESTOSTERONE

There are several birth control options for people who have a uterus and ovaries and who take testosterone. The progestin pill, implant, IUD, and shot may help decrease monthly bleeding. Some people use one of these methods just to control bleeding, even if they don't need birth control. Progestin does not interact with testosterone. The copper IUD prevents pregnancy and contains no hormones. Condoms prevent pregnancy and sexually transmitted infections (STIs).

### BIRTH CONTROL FOR PEOPLE TAKING ESTROGEN

People who have a penis and testes and who take estrogen can choose any birth control method.

### PERMANENT OPTIONS

Permanent methods are great for people who don't ever want to get pregnant. These include tubal ligation, Essure, hysterectomy, orchiectomy, and vasectomy.

### DON'T FORGET ABOUT SEXUALLY TRANSMITTED INFECTIONS!

Condoms can prevent human immunodeficiency virus (HIV) and other STIs. There are two types of condoms, internal and external. Both types help to prevent pregnancy and infections.

## BIRTH CONTROL CHOICES ACROSS THE GENDER SPECTRUM

Method	How well does it work?	How to Use	Pros	Cons
<b>The Implant</b> Nexplanon® 	> 99%	A health care provider places it under the skin of the upper arm. It must be removed by a health care provider.	It may last up to 5 years. It often decreases cramps. After 1 year, you may have no monthly bleeding at all. It may lower the risk of uterine lining cancer, ovarian cancer, and polycystic ovary syndrome (PCOS).	May cause spotting. It may cause mood changes.
<b>Progestin IUD</b> Liletta®, Mirena®, Skyla® and others 	> 99%	A health care provider places it in the uterus. It is usually removed by a health care provider.	It works for 3 to 7 years, depending on which IUD you choose. It may improve monthly bleeding and cramps. After 1 year, you may have no monthly bleeding at all. It may lower the risk of uterine lining cancer, ovarian cancer, and polycystic ovary syndrome (PCOS).	May cause spotting.
<b>Copper IUD</b> ParaGard® 	> 99%	A health care provider places it in the uterus. It is usually removed by a health care provider.	May be left in place for up to 12 years	May cause spotting (if you are taking testosterone, this may not be an issue).

June 2018 | [www.reproductiveaccess.org](http://www.reproductiveaccess.org)



# HEALTH MAINTENANCE IN TRANSMASCULINE INDIVIDUALS

## ■ Pregnancy

- Important to discuss an individual's desires and provide info on possibilities and options available
  - Wierckx, 2011 Reproductive Wish in Transsexual Men: 50 trans men surveyed
    - **More than half (54%)** expressed a desire to have children
    - 37.5 % would have preserved oocytes if it had been possible



*Original Research*

## Transgender Men Who Experienced Pregnancy After Female-to-Male Gender Transitioning

*Alexis D. Light, MD, MPH, Juno Obedin-Maliver, MD, MPH, Jae M. Sevelius, PhD, and Jennifer L. Kerns, MD, MPH*

# HEALTH MAINTENANCE IN TRANSMASCULINE INDIVIDUALS

## ▪Cardiovascular Disease

No increased risk of cardiovascular or cerebrovascular events in several short and medium-term follow up studies

- Increase systolic blood pressure
- Decreased in HDL
- Increased BMI

(Gooren, 2014)

Reference	n	Follow-up	Treatment regimen	Outcome
Asscherman, 1989	122	Median duration of HRT of 4.4 yrs	Testosterone 250mg IM q2wks or undecanoate 120-160mg/d	No increased cardiovascular morbidity
VanKesteren, 1997	293	Mean duration HRT of 8.2yrs	Testosterone 250mg IM q2wks or undecanoate 160mg/d	No increased cardiovascular morbidity
Asscherman, 2011	365	Median duration HRT 18.5yrs	Testosterone 250mg IM q2wks or undecanoate 160mg/d	No increased cardiovascular mortality rate
Dhejne, 2011	133	Median times since SRS was 9.1yrs	Not specified	Higher mortality due to CVD compared with controls
Bazarro-Castro, 2012	37	Mean duration HRT 4.9yrs	Difference T preparations	No difference in CV morbidity compared with control men and women
Weirckx, 2013	138	Median duration HRT of 6yrs	Difference T preparations	No difference in CV morbidity compared with control men and women

# HEALTH MAINTENANCE IN TRANSMASCULINE INDIVIDUALS

- Trans men seem to have an increase in obesity compared to their natal male counterparts (though not natal female), poorer lipid profile, elevated blood pressure, and potential increase in hematocrit (Irwig, 2018)
- Trans men have increased smoking rates compared to the general public
- ... ALL of these factors together lead to concern for possible future cardiovascular events in longer term follow ups



# HEALTH MAINTENANCE IN TRANSMASCULINE INDIVIDUALS

## ▪Diabetes

- Slightly higher prevalence of Diabetes type 2 than control population
  - Comparison to PCOS/androgen excess in non-trans women?
    - No correlation between T levels and IR parameters either in women with PCOS nor in FtMs before or after T treatment
    - IR parameters were more strongly associated with obesity than attributable to T levels, as was also apparent from the sensitivity analysis of women with PCOS vs FtMs of similar BMI and age
    - Administration of oral contraceptives to PCOS women decreases T levels, with no change of fasting insulin and IR indices (Cupist S, 2010)
- Screening bias - Increased endocrine screening prior to initiation of hormone therapy



# PREVENTIVE HEALTH FOR TRANSFEMININE INDIVIDUALS



# HEALTH MAINTENANCE IN TRANSFEMININE INDIVIDUALS

- Pelvic exam/PAP smear

- No indication for pap tests
- YES to pelvic exams to assess surgical site, for acute genital issues, on-going preventive screening



# HEALTH MAINTENANCE IN TRANSFEMININE INDIVIDUALS

## ▪The pH and microflora of the neo-vagina

- Differs significantly from a natal female vagina (Weyers S, 2009)

### 1. Lack of lactobacilli

- Natal females primarily colonized with lactobacilli, which gives antimicrobial protection

### 2. Alkaline environment — lower estrogen in vaginal tissue —> no up-regulation of proton pumps and lack of protective mucus production

### 3. Mixed microflora of aerobe and anaerobe species — typically found on the skin, intestine, and in bacterial vaginosis

- \*\* More complex BV - specifically presence of anaerobes — are difficult to treat

- Consider treatment with clindamycin or amoxicillin

- NO candida seen

## ▪Transgender Health, 2018: Symptomatic Neovaginal Candidiasis in Transgender Women After Penile Inversion Vaginoplasty: A Clinical Case Series of Five Consecutive Patients. de Haseth, et al.

- culture-proven intravaginal candida infections,

- No proper recommendations on optimal vaginal hygiene, but some speculate best to douche with warm water alone, if anything at all



# HEALTH MAINTENANCE IN TRANSFEMININE INDIVIDUALS

## Hyperprolactinemia:

- Initial, transient elevation of prolactin not uncommon
- Prolactinomas - UNcommon
- 9 cases of prolactinomas in a review of the Dutch cohort of 2555 transgender women; Nota, 2018

Prolactinoma				
Case 1 (microadenoma) <sup>e</sup>	52 years	±177 months	Conjugated oestrogens 0.625 mg	Yes
Case 2 (microadenoma)	32 years	±53 months	CPA 100 mg, oestradiol injection 100 mg/2weeks	Yes
Case 3 (microadenoma)	39 years	±172 months	CPA 100 mg, conjugated oestrogens 2.5 mg	Yes
Case 4 (microadenoma)	27 years	±156 months	CPA <sup>d</sup> , oestradiol injection <sup>d</sup>	No
Case 5 (microadenoma)	46 years	±66 months	CPA 100 mg, ethinylestradiol 100µg	No
Case 6 (microadenoma)	24 years	±9 months <sup>f</sup>	CPA 100 mg	No
Case 7 (microadenoma)	47 years	±91 months	CPA 100 mg, ethinylestradiol 100µg	Yes
Case 8 (microadenoma)	29 years	±143 months	Ethinylestradiol 50-100µg	Yes
Case 9 (macroadenoma)	28 years	±134 months	CPA 50 mg, oestradiol valerate 2 mg	Yes

\*\* Slightly higher incidence than the general population, but only 6/9 symptomatic

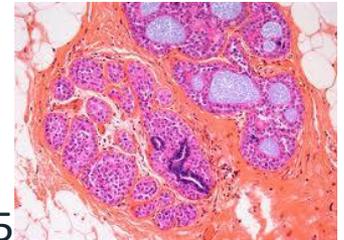
- Some suggestion that an excessive first year increase in serum prolactin concentration may identify patients at risk for autonomous prolactin secretion later in life (n=2) (Bunck 2009, Cunha 2015)
- Role of estrogen vs cyproterone acetate as cause for hyperprolactinemia (Fung 2016, Nota 2017)
- PROLACTIN LEVELS DO NOT RISE AMONG TRANSFEMININE INDIVIDUALS TREATED WITH ESTRADIOL AND SPIRONOLACTONE; [Bisson JR1](#) [Chan KJ](#), [Safer JD](#)



# HEALTH MAINTENANCE IN TRANSFEMININE INDIVIDUALS

## ▪ Mammography and CBE

- 20 Cases total in literature (3 not related to E use)
  - Gooren, 2013 retrospectively identified 2 cases in 2300 trans women (incidence of 4.1/100,000)
  - Brown, 2015 identified 3 cases in 5130 trans women (incidence of 0.09/100,000)
  - 15 additional case reports
- NO increase in incidence of malignancy over the general population (compared to 1.2 and 170/100,000 person yrs of followup for cis-men and women)
- The VHA study showed the detection was late and outcomes poorer for MtF
- Ductal carcinoma is most common histological subtype of CA in natal men - most cases of CA in MtF were ductal
- Risk factors for male breast cancer: BRCA mutations, obesity, androgen insufficiency (Klinefelter), estrogen exposure
- Degree and duration of estrogen exposure
  - WHI: Progestin, with estrogen, increases risk of breast cancer
- Recommendations:
- Patients over age 50 who have been on feminizing endocrine agents over 5 ,



# HEALTH MAINTENANCE IN TRANSFEMININE INDIVIDUALS

## ▪ Prostate screening

- 7 reported cases of prostate cancer total in review of literature (Gooren, Morgentaler, 2014)
- In Dutch cohort, 1975-2006, retrospectively looking at 2300 trans women, only 1 case identified
  - 4/7 initiated androgen-blocker and estrogen therapy > 48yrs old
  - 6/7 cases PSA was elevated

## ▪ Recommendations:

- As per natal men
  - Androgen antagonists may falsely decrease serum PSA levels, consider lower threshold for suspicion
  - Feminizing hormonal therapy appears to decrease prostate volume and the risk of prostate cancer but to an unknown degree — effectively receiving androgen deprivation therapy!
  - In natal men, orchiectomy before age 40 appears to prevent prostate CA



# HEALTH MAINTENANCE IN TRANSFEMININE INDIVIDUALS

## ▪ Bone Density Screening

- Somewhat mixed results — Increase in osteopenia and osteoporosis compared to cis-men, but BMD generally preserved compared to cis-women
  - Observed lower BMD in MTFs **PRIOR** to start of estrogen therapy (Van Caenegem, 2013)
  - Consider protocols starting androgen-blockers for 1yr, before addition of estrogen therapy
- Short vs long-term findings and risk factors (Figuera)
  - Several studies show preservation of BMD during initial few yrs (Laupuw, sosa, van caenegem)
    - Decreased levels of bone turnover markers in setting of hormone therapy
  - However, long-term with reports of ~25% osteoporosis in lumbar spine (wierchx, valentini, T'soen)
    - Changes in body composition: Lean mass vs fat mass effects on bone
- Recommendations:
- **Consider if over age 60 and off estrogen therapy for longer than 5 years**
  - not routinely indicated prior to orchiectomy



# HEALTH MAINTENANCE IN TRANSFEMININE INDIVIDUALS

## ▪ Cardiovascular Disease

- Higher cardiovascular mortality rate in trans women than the general population
- - 64% increased risk in cardiovascular mortality was seen, however no significant difference was seen for cerebrovascular mortality (Asscheman, 2011)
  - Maj Factors - Estrogen types (ethinyl estradiol), cyproterone acetate, supratherapeutic hormones, smoking status, obesity, baseline CV health, diabetes
- - 2018 Kaiser study: Significant increase risk of VTEs and ischemic stroke over both cis-male and female controls, but little difference in MIs (Getahun, 2018)
  - Difference more pronounced by increased length of follow-up
- Exogenous estrogen can increase blood pressure
  - Spironolactone can lower BP
  - Increased HDL and decreased LDL cholesterol, but increased triglycerides
  - **Consider effects of age and time of initiation of estrogen therapy (WHI)**
  - Effects of androgen blockage and androgen deprivation therapy on metabolic affects



# HEALTH MAINTENANCE IN TRANSFEMININE INDIVIDUALS

**Table 1** Effects of hormone therapy on cardiovascular events (Irwin, 2018)

Event	Risk		Comments
	Trans women	Trans men	
Myocardial infarction	Probable increase	Unknown	<ul style="list-style-type: none"> <li>• Rates are much lower in trans men than in trans women</li> <li>• In trans women ethinyl estradiol may confer a greater risk</li> </ul>
Stroke	Probable increase	No increase	<ul style="list-style-type: none"> <li>• Rates are much lower in trans men than in trans women</li> <li>• In trans women avoid ethinyl estradiol</li> <li>• In post-menopausal women, the risk is dose dependent and oral estrogen formulations confer a greater risk than transdermal</li> </ul>
Venous thromboembolism	Definite increase	No increase	<ul style="list-style-type: none"> <li>• Rates are 0–5% in trans women and 0–0.34% in trans men</li> <li>• In post-menopausal women, oral estrogen formulations confer a greater risk than transdermal</li> </ul>

Ethinyl estradiol assoc w/3-fold increased risk of CV death (Gooren, 2011)

## Recommendations:

Avoid prescribing ethinyl estradiol at any point

Consider transdermal or low-dose oral estradiol in patients >40yrs old

Lifestyle behaviors — healthy diet, smoking cessation, exercise — can reduce cardiovascular risk!



# HEALTH MAINTENANCE IN TRANSFEMININE INDIVIDUALS

## ▪ Venous thromboembolism

- In the Dutch cohorts, rates of 2.6% annually in first year, falling to 0.4 % thereafter, with 1 – 2% risk of death from PE
  - BUT all but 1 of these patients was using oral ethinyl estradiol
  - Similar to CVD rates seen on controlled natal females using OCPs with high dose (50mcg) ethinyl estradiol
- Belgian cohorts also showed increased incidence of VT (6-8%), but ONLY in patients treated with ethinyl estradiol
- Kaiser study also showing increased rates of VTE over the matched controls for both birth and affirmed sex
  - Difference more pronounced with increased follow up after 2yrs



# Health Maintenance in Transfeminine Individuals

- Venous thromboembolism

Matched OR				
	Cases	Controls	Crude	Adjusted*
Nonuse	145	384	1	1
Oral Estrogen	45	39	3.6 (1.5-8.8)	4.2 (1.5-11.6)
Transdermal Estrogen	67	180	0.8 (0.4-1.6)	0.9 (0.4-2.1)

Adjustment for obesity status, familial history of VTE, history of varicose veins, education, onset of menopause, hysterectomy, and cigarette smoking  
Circulation 2007



# HEALTH MAINTENANCE IN TRANSFEMININE INDIVIDUALS

## ■ Diabetes:

- Higher prevalence of DM, but almost all diagnoses made BEFORE starting estrogen therapy in trans female (Weirckx, 2013)
- Studies suggesting increased insulin resistance in the setting of estrogen, but no observed direct link between estrogen treatment and development of DM



# CASES



# CASE #1

- 24yo AFAB non-binary individual on topical testosterone.
- 3mo ago started to experience bleeding from the frontal canal - thinks occurring monthly, but unsure. Periods had resolved shortly after starting T 2yrs ago and without issue up until now
- They identify as pan-sexual and are currently sexually active with people of all body types. Condom use is inconsistent



# CASE #1

1. What are some possible causes of frontal canal bleeding?
2. What options might be recommended to stop this bleeding?
3. Any other questions you might consider asking this person regarding their sexual health?



# CASE #1

1. What are some possible causes of recurrence of menses?

- If monthly/regular, consider inconsistent use of topical testosterone and/or poor absorption

- If assoc with discomfort or bleeding irregular, consider infection

- Pregnancy!

- Postcoital bleeding secondary to atrophic canal and cervix

- Consider elevated T levels and high rates of aromatization. Unlikely here on topical T, but may be higher risk if obese patient

2. What options might be recommended to stop this bleeding?

3. Any other questions you might consider asking this person regarding their sexual health?



# CASE #1

1. What are some possible causes of recurrence of menses?
2. Let's say that this patient was dosing inconsistently and sweating like crazy most days with new work out plan. What options might be recommended to stop this bleeding?
  - Alternative form of testosterone: low-dose injections, patches, long-acting T (Testopel)
  - Progesterone ... since patient reports exposure to sperm, birth control would be reasonable and a good idea! Consider LARC such as Nexplanon or Mirena
3. Any other questions you might consider asking this person regarding their sexual health?



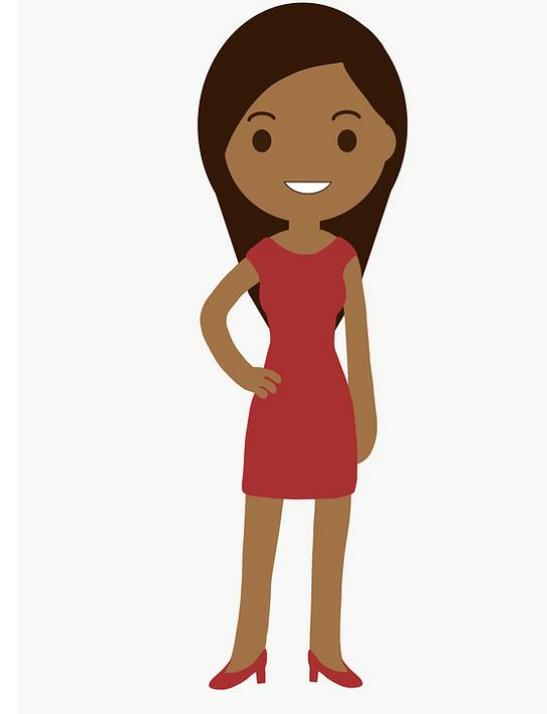
# CASE #1

1. What are some possible causes of recurrence of menses?
2. What options might be recommended to stop this bleeding?
3. Any other questions you might consider asking this person regarding their sexual health?
  - What types of sex are you having? What body parts are coming in contact with your body and where are they going?
  - Are you discussing safe sex and getting tested regularly?
  - Do you know about PrEP and PEP (post-exposure prophylaxis)?
  - Do you remember that even if your menses stops if T is increased, testosterone itself is not a method of birth control?



# CASE #2

- 52yo healthy transgender woman who has been on estrogen therapy for 3yrs and is s/p vaginoplasty 1yr ago.
- Presents for her annual physical and states she very interested in a full check up and preventive screening tests, mammogram, pap test, and colonoscopy, etc.
- Obtaining a sexual history reveals that she is newly sexually active with a new cis-male partner. They are not using condoms. She has been experiencing some moderate vaginal irritation with sex, increased discharge, and an abnormal odor.



# CASE #2

1. What age-related preventive screening tests should be considered for this patient?
2. What questions about her sex practices might be helpful to know?
3. What other questions might add to your differential?
4. What is the differential for her vaginitis symptoms?
5. What exams and testing would you consider?



# CASE #2

## 1. What age-related preventive screening tests should be considered for this patient?

- **Mammogram** - recommendation is for a mammogram starting at age 50, but only if she has been on estrogen for at least 5yrs. She has only been on for 3yrs, so risk may not warrant the testing yet.
  - DO screen for fam hx and other risk factors. Consider clinical breast exam
- **Pap test** - Not indicated. She does not have a cervix or transformation zone in that area
- **Colonoscopy** - Yes! No known rationale for adjusting screening for colon cancer in indiv on gender-affirming hormones. 50yr old for everyone!
- **Prostate screening** - Her anatomical inventory reveals that her prostate is still there, which is typical for almost all women despite gender-affirming genital surgery. Prostate screening should be based on current USPSTF guidelines, patient's family history and risk factors, and any current symptoms.
  - If screening indicated, please remember that anti androgens can falsely suppress PSAs, so a PSA of 1 may warrant further evaluation, esp in setting of symptoms or risks
- **CV (lipids, BP) and Diabetes screening** - Yes! As recommended by USPSTF. Remember to aggressively manage CV risk factors in women over the age of 40, with diabetes, and with any other risk factors (smoking, obesity, family history, hyperlipidemia)

## 2. What is the differential for her vaginitis symptoms?

- What questions about her sex practices might be helpful to know?
- What other questions might add to your differential?
- What exams and testing would you consider?



# CASE #2

1. What age-related preventive screening tests should be considered for this patient?
3. What is the differential for her vaginitis symptoms?
  - What questions about her sex practices might be helpful to know?
    - What types of sex are you having? - Vaginal? Anal only?
    - Are these symptoms new or onset since starting to be sexually active? - Pelvic floor disorder? Vaginismus?
    - When was your (and your partner's) last STD screening? - STD exposure and infectious disease
  - What other questions might add to your differential?
    - Are you using any other products? New lube? Do you douche? - Bacterial vaginosis
    - New partner? New condoms? New lube? - Rough sex, irritation from condom?
    - Postcoital bleeding? - condyloma, granulation tissue
  - What exams and testing would you consider?
    - Perform a physical exam! Look for any abnormalities: Granulation tissue, condyloma, fissures, irritation, abnl odor, discharge, lesions/sores
    - GC/CT testing... ? if possible at the squamous epithelium, but rec is to swab
    - BV and yeast culture
    - Culture any lesions - HSV, fissures, abscesses, etc
    - Treat granulation tissue with silver nitrate stick



# RESOURCES

- **UCSF Center of Excellence for Transgender Health Guidelines**
  - <http://transhealth.ucsf.edu/trans?page=lib-00-00>
- **Tom Waddell Health Center**
  - <https://www.sfdph.org/dph/comupg/oservices/medSvs/hlthCtrs/TransGendprotocols122006.pdf>
  - Vancouver Coastal Health Guidelines
  - <http://transhealth.vch.ca/resources/careguidelines.html>
- **The Endocrine Society Guidelines (First published September, 2009)**
  - <http://www.endo-society.org/guidelines/final/upload/Endocrine-Treatment-of-Transsexual-Persons.pdf>
- **Transline**
  - <http://project-health.org/transline/>

