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Transgender Care

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Cases in Transgender Primary Care

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Outline

- **Objectives**
- Review of trans epidemiology
- Healthcare and the Transcommunity
- Cases 1&2
  - Taking a transgender History
  - CSH indications
- Case 3
  - Mental Health and Transpersons
- Case 4
  - Cardiovascular Risks and Estrogen in Transwomen
- Provider Resources

Objectives

My goals for you at the end this lecture:

- Comfort in determining which transgender patients meet criteria for initiating CSH
- Appreciation of the overlap between transgender identity and psychiatric disease as mediated primarily by trauma
- Improved self efficacy in weighing risks/benefits of CSH therapy
- Familiarity with resources available to help support primary care providers take care of transgender patients

Transgender Community Size

- 0.1-0.5% of global population[1,2]
- Estimated at 700,000 US persons[3]
- Isolated global examples exist:
  - Fa'afafines (Samoa)
  - Hijra (India)

1.Bye L, Gruskin E, Greenwood, G, Albright V, Krotki K. California Lesbians, Gays, Bisexuals, and Transgender (LGBT) Tobacco Use Survey – 2004. Sacramento, CA: California Department of Health Services, 2005.

2.Conron K, Scott G, Stowell G, Landers S. Transgender Health in Massachusetts: Results From a Household Probability Sample of Adults. *Am J Public Health*. 2012 January; 102(1): 118–122.

3.Gates GJ. How Many People Are Lesbian, Gay, Bisexual, and Transgender? Los Angeles, CA: Williams Institute, University of California, Los Angeles School of Law; 2011. Available at: http://www3.law.ucla.edu/ williamsinstitute/pdf/How-many-people-are-LGBTFinal.pdf. Accessed November 2015.

The Trans Community and Healthcare

- Only 30-40% of transgender persons receive regular medical care[4]
- 19% had been refused medical care[5]
- 28% verbally harassed in medical setting[5]
- 2% physically assaulted in a physician's office[5]
- 50% have had to teach their physician about transgender health[5]
- Barriers: inability to access transgender friendly, and transgender-knowledgeable physicians[4]

4.Sanchez NF, Sanchez JP, Danoff A. Health Care Utilization, Barriers to Care, and Hormone Usage Among Male-to-Female Transgender Persons in New York City. American Journal of Public Health. 2009;99(4):713-719.

5 Grant JM, Mottet LA, Tanis J, Harrison J, Herman JL, Keisling M. Injustice at Every Turn: A Report of the National Transgender Discrimination Survey. Washington: National Center for Transgender Equality and National Gay and Lesbian Task Force, 2011

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Cases 1 & 2

D.H., a 22 y.o biological female seeking CSH

- Transidentity emerged in 9th grade
- “I am in the wrong body”
- Wanted to be on the baseball team instead of softball team
- Hates being penetrated during sex b/c reminder “that I have a vagina”
- Transitioned socially 2 years prior, has undergone legal name change, uses male pronouns in all aspects of life
- Has been seeing a gender therapist for 2 years, hx of adjustment disorder, no other chronic psych/medical dx

A.D., a 34 y.o. biological male seeking CSH

- Since I was a toddler I “always knew I was not a boy but I did not know of an alternative”
- “At first I thought I was just gay” and came out as gay to family yrs ago
- Came out as trans to sister only 1 week prior
- Hx of drug abuse with multiple intentional overdoses
- Incarcerated (drug related)
- Succeeded in getting bachelor’s and planning to go to law school soon
- "I want to start hormones today”

Interviewing Prior to Initiation of CSH therapy

- Emergence and persistence of transidentity?
- Goals of treatment (appear more masculine/feminine?, Top or bottom surgery?, androgynous appearance?)
- Social Support- Family? Friends? Work colleagues?
- Trauma history? (emotional, verbal, physical, sexual abuse)
- Psychiatric Hx? (hospitalizations, medications, SI/HI, attempts)
- History of prior gender affirming interventions (prescribed vs unprescribed meds, surgeries)?
- Employment, Food, Housing issues?
- Sexuality, and STD risks
- Substance use?
- Plans for fertility?
- Hx of preventative screenings especially sex organ screenings?
- Other medical problems?

Cases 1 & 2

D.H., a 22 y.o biological female seeking HRT

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Cross Sex Hormones

- Estrogens (and androgen blockers) in people assigned to male sex at birth
- Androgens in people assigned to female sex at birth
- Purpose: induce/maintain physical and physiological characteristics of sex that matches a person's gender identity
- Not all trans people will take
- Various protocols exist; no head to head trials comparing safety, efficacy
- Eg. 50mg once a week subcutaneously of testosterone cypionate
- Eg. 2mg BID of estradiol sublingually, and 50mg BID of spironolactone

Selection of Appropriate Adult Patients for CSH

WPATH Standards of Care, 7th Version

Transgender ≠ Gender Dysphoria

Criteria for Hormone Therapy

1. Persistent, well-documented gender dysphoria
2. Capacity to make a fully informed decision and to consent to treatment
3. Age of majority in a given country*
4. If significant medical or mental health concerns are present, they must be reasonably well controlled

[6]Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People 7th version. The World Professional Association for Transgender Health. 2011 <http://www.wpath.org>

Cases 1 & 2

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- "I want to start hormones today”

Case 1 Continued

D.H. was started on typical dose of testosterone cypionate (50mg SQ qweek)

1 month later seen in f/u and patient reports:

- “Change in voice”
- “Increased energy”
- “Slight increase in facial hair”

Requesting increase in testosterone dose to accelerate changes.

Masculinizing Effects of Testosterone		
Effect	Onset (months)	Maximum (years)
Skin oiliness/acne	1-6	1-2
Fat redistribution	1-6	2-5
Cessation of Menses	2-6	
Clitoral Enlargement	3-6	1-2
Vaginal atrophy	3-6	1-2
Emotional changes		
Increased sex drives		
Deepening of voice	3-12	1-2
Facial/Body Hair Growth	6-12	4-5
Scalp Hair Loss	6-12	
Increased Muscle Mass & Strength	6-12	2-5
Coarser Skin/Increased Sweating		
Weight Gain/Fluid Retention		
Mild Breast Atrophy		
Weakening of Tendons		

- Changes take years to be complete
- Some changes are reversible, others are permanent
- Early, intermediate, late changes

[7]Taken from Cavanaugh, T, Hopwood, R, Gonzalez, A, Thompson, J. The medical care of transgender persons. Boston, MA: Fenway Health; 2015 Oct. 38 p.

Feminizing Effects of Estrogens & Anti-androgens		
Effect	Onset (months)	Maximum (years)
Decreased Libido	1-3	3-6
Decreased Spontaneous Erections		
Breast Growth	3-6	24-36
Decreased Testicular Volume	3-6	24-36
Decreased Sperm Production	Unknown	Unknown
Redistribution of Body Fat	3-6	24-36
Decrease in Muscle Mass	3-6	12-24
Softening of Skin	3-6	Unknown
Decreased Terminal Hair	6-12	> 36

[7]Taken from Cavanaugh, T, Hopwood, R, Gonzalez, A, Thompson, J. The medical care of transgender persons. Boston, MA: Fenway Health; 2015 Oct. 38 p.

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Weakening of Tendons		

- Changes take years to be complete
- Some changes are reversible, others are permanent
- Goal is to achieve physiologic range of hormones
- Checking hormones can be particularly helpful if patient is not masculinizing/feminizing along expected time course
- Avoid supraphysiologic levels of hormones

[7]Taken from Cavanaugh, T, Hopwood, R, Gonzalez, A, Thompson, J. The medical care of transgender persons. Boston, MA: Fenway Health; 2015 Oct. 38 p.

Cases 1&2 Summary

- Taking a transgender history
- Criteria exist to help you determine patient appropriateness for CSH therapy
- Hormonal transition is a process that can take 2-3 years (or longer) to be complete

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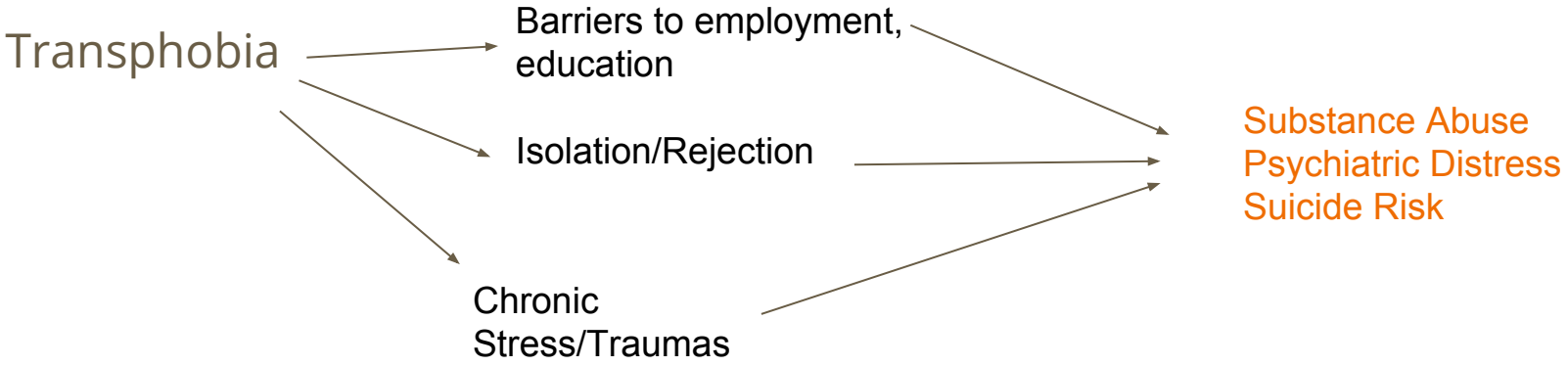
Case 3

D.D., a 26 yo transgender male with psych hx of bipolar (stable for years)

- 11/11/2016 - RN does patient teaching on self administration of T
- 11/15/2016 - pap smear visit
- 11/27/2016 - E.D. visit for increased anxiety, ran out of meds
- 11/30/2016 - clinic follow up
  - New onset sexual interest & activity
  - Notified therapist
  - Agreed to closely follow
- 12/8/2016- hospitalized for acute mania

Mental Health & Transpersons

- The majority of transgender population does not have a clinically coexisting psychiatric condition!!!
- Still, transpersons at high risk for mood disorders, thought to be socially induced by transphobia (prejudice against transgender persons)



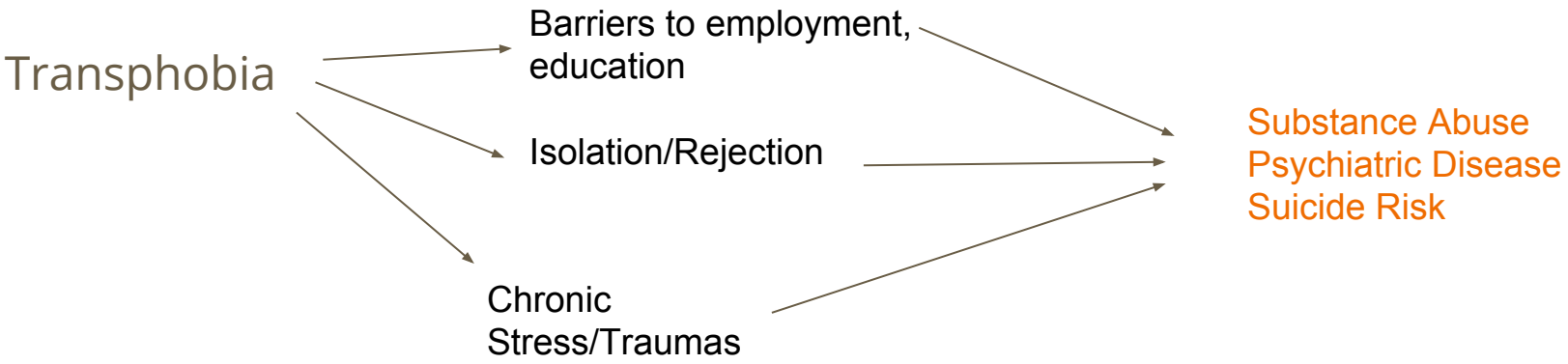
Impact of CSH on Mental Health

- Some evidence that access to gender affirming therapies can improve the quality of life and psychiatric symptomatology in transgender patients
  - Better self esteem, mood after access to hormone therapy[8]
  - Lower rates of self reported anxiety and depression[9]
  - CSH associated with improved QoL and mental health but level of evidence low[10]

8. Gomez-Gil E, Zubiaurre-Elorza L, Esteva I, et al; Hormone-treated transsexuals report less social distress, anxiety, and depression. *Psychoneuroendocrinology* 2012; 37: 662-670.
9. Colizzi M, Costa E, Todarello O.Transsexual patients' psychiatric comorbidity and positive effect of cross sex hormonal treatment on mental health: results from a longitudinal study. *Psychoneuroendocrinology* 2014; 39: 65-73.
10. White Hughto JM, Reisner SL. A systematic review of the effects of hormone therapy on psychological functioning and quality of life in transgender individuals. *Transgender Health* 2016; 1(1): 21-31.

Mental Health & Access to Gender Affirming Treatment

- Relief of gender dysphoria



What about testosterone?

The Standards of Care

TABLE 2: RISKS ASSOCIATED WITH HORMONE THERAPY. BOLDED ITEMS ARE CLINICALLY SIGNIFICANT

Risk Level	Feminizing hormones	Masculinizing hormones
Likely increased risk	**Venous thromboembolic disease**[A] Gallstones Elevated liver enzymes Weight gain **Hypertriglyceridemia**	**Polycythemia** Weight gain Acne Androgenic alopecia (balding) Sleep apnea
Likely increased risk with presence of additional risk factors[F]	Cardiovascular disease	
Possible increased risk	**Hypertension** Hyperprolactinemia or prolactinoma	Elevated liver enzymes **Hyperlipidemia**
Possible increased risk with presence of additional risk factors[B]	**Type 2 diabetes**[A]	**Destabilization of certain psychiatric disorders**[C] **Cardiovascular disease** **Hypertension** **Type 2 diabetes**
No increased risk or inconclusive	**Breast cancer**	Loss of bone density **Breast cancer** **Cervical cancer** **Ovarian cancer** **Uterine cancer**

- No clear evidence that testosterone precipitates mania

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Case 4

M.D. is a 50 year old transgender woman with HTN and tbx dependence and with new onset of right lower extremity symptoms concerning for intermittent claudication. She has been on a regimen of 3mg BID of oral estradiol for many years. As part of her workup, she underwent a treadmill ABI, the results of which are significant for moderate to severe arterial occlusive disease of the bilateral lower extremities. Concerned, MD inquires whether this diagnosis requires her to stop taking estradiol.

Some Potential Side Effects of Estrogen Therapy

- Elevated blood pressure
- Decreased glucose tolerance
- Weight gain
- Increased triglycerides

Hormones, CVD risks in Transwomen

- Degree of cardiovascular risk posed by oral estrogen remains controversial
- Subsequent studies of cisgender women contradictory conclusions about the risk of stroke and MI in postmenopausal women on HRT[11]
- Some evidence that transwomen on estrogen > CVD mortality than cismales[12]
- But, higher rates of smoking, HLD in transwomen compared to cisgender males confound evidence
- High quality RCTs on transwomen lacking

Route of Estrogen & CVD risk

- Switching from oral to a transdermal form of estrogen delivery may present a lower risk option
- Studies in cisgender postmenopausal women that found no association of stroke with low doses of transdermal estrogen as compared with the elevated stroke risk seen with both low and high doses of oral estrogen[13,14]
- Unclear- may involve differential activation of the coagulation and/or inflammatory cascades?

Case 4 Conclusion

- Started on a regimen of aspirin 81mg, atorvastatin 40mg
- Referred to vascular surgery for further management
- Behavioral counseling for smoking cessation and daily exercise
- Switched to transdermal estrogen for continuation of her cross sex hormone therapy

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Resources

- UCSF Center of Excellence for Transgender Health
  - Guidelines for the Primary and Gender-Affirming Care of Transgender and Gender Nonbinary People, 2nd edition, July 2016
  - http://transhealth.ucsf.edu/trans?page=guidelines-home
- Fenway Institute
  - The Medical Care of Transgender Persons, Fall 2015
  - http://fenwayhealth.org/
- Transline
  - Free online medical consultation service
  - http://project-health.org/transline/
- National Center for Transgender Equality
  - www. transequality.org

References

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Thank you!

DSM-V

Gender Dysphoria in Adolescents and Adults

1. A marked incongruence between one's experienced/expressed gender and assigned gender, of at least 6 months' duration, as manifested by at least two of the following:
    1. A marked incongruence between one's experienced/expressed gender and primary and/or secondary sex characteristics (or in young adolescents, the anticipated secondary sex characteristics).
    2. A strong desire to be rid of one's primary and/or secondary sex characteristics because of a marked incongruence with one's experienced/expressed gender (or in young adolescents, a desire to prevent the development of the anticipated secondary sex characteristics).
    3. A strong desire for the primary and/or secondary sex characteristics of the other gender.
    4. A strong desire to be of the other gender (or some alternative gender different from one's assigned gender).
    5. A strong desire to be treated as the other gender (or some alternative gender different from one's assigned gender).
    6. A strong conviction that one has the typical feelings and reactions of the other gender (or some alternative gender different from one's assigned gender).
2. The condition is associated with clinically significant distress or impairment in social, occupational, or other important areas of functioning.

"Gender Dysphoria." *American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition.* Arlington: American Psychiatric Association, 2013.