Transhealth in Primary Care

Andie Lesowske, MD
Case example

• Taylor
• 35 yo male
• Establish care/transgender
Outline

• Transinclusive history
• Data of cross sex hormone therapy
• Primary care of a transgender patient
Principles for taking an LGBTQ-inclusive health history

- Make no assumptions
- Respect all identities and behaviors
- Build trust
Principles for taking an LGBTQ-inclusive health history

• Ask the same questions of ALL patients
  – If it’s not relevant, don’t ask
• Pay attention to your internal reactions
• Apologize immediately for mistakes
• Build trust
Case example

**ADULT HEALTH HISTORY FORM**

- **Preferred Name:** Taylor Leroy
- **Occupation:** Server
- **Preferred Pronoun:** She/Her
- **Sexual Orientation:** Straight
- **Gender Identity:** TransFemale
- **Sex Assigned at Birth:** Male
- **Who lives at home with you?** Zach Leroy
Case example

ADULT HEALTH HISTORY FORM

Preferred Name: Zach Leroy
Preferred Pronoun: He/Him
Sexual Orientation: Straight
Use contraception?: No
Who lives at home with you? Partner, Dog

Occupation: Manager
Gender Identity: TransMale
Sex Assigned at Birth: Male

Pronoun not listed

Lesbian
Bisexual
Queer

TransFemale
Genderqueer

Female
Intersex
Safely prescribing hormones

• Transgender suicide attempt rate: 41%
• Gender affirmation saves lives
Hormone Treatment:

• Transmen (FTM)
  — Testosterone

• Transwomen (MTF)
  — Anti-androgen therapy
  — Estrogen therapy
Hormone Guidelines

• According to the Endocrine Society Practice Guidelines for transsexual persons: Cross Sex Hormone Therapy safety is comparable to hormone therapy safety of cisgender people
Transmasculine Hormone Therapy
Cisgender testosterone

- Hypogonadism
  - Adverse effects:
    - Erythrocytosis
    - Sleep apnea
    - Cardiovascular risk
    - Certain formulations
      - Patch – skin irritation
      - Topical gel/cream – skin transfer to others
      - Oral – altered liver function
Masculine hormone monitoring

- Serum testosterone
- Hemoglobin, hematocrit
- Routine cardiovascular screening
- Routine cancer screening
Transhealth Data

• Most data from Dutch health system
• Limited number of participants
• Variable hormone protocols
Dutch mortality cross-sex hormones

- Cohort study
- Median follow up 18 years
- 365 FtM subjects
- Mortality compared to general population
- Testosterone treatment: injections, transdermal and oral
<table>
<thead>
<tr>
<th>Age at start (mean ± s.d.)</th>
<th>31.4 ± 11.4</th>
<th>26.1 ± 7.6</th>
</tr>
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<tbody>
<tr>
<td>Age groups (n (%))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15–24</td>
<td>329 (34.1)</td>
<td>204 (55.9)</td>
</tr>
<tr>
<td>25–39</td>
<td>429 (44.4)</td>
<td>145 (39.7)</td>
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<td>199 (20.6)</td>
<td>16 (4.4)</td>
</tr>
<tr>
<td>65–80</td>
<td>9 (0.9)</td>
<td>0</td>
</tr>
<tr>
<td>Smoking status (n (%))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>254 (26.3)</td>
<td>94 (25.8)</td>
</tr>
<tr>
<td>Current</td>
<td>373 (38.6)</td>
<td>131 (35.9)</td>
</tr>
<tr>
<td>Former or unknown</td>
<td>339 (35.1)</td>
<td>140 (38.3)</td>
</tr>
<tr>
<td>Starting date before 1990 (n (%))</td>
<td>619 (64.2)</td>
<td>197 (54.0)</td>
</tr>
<tr>
<td>Sex reassignment surgery (n (%))</td>
<td>834 (86.7)</td>
<td>343 (94.0)</td>
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<tr>
<td>Follow-up on hormone treatment (years ± s.d.)</td>
<td>19.4 ± 7.7</td>
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</tr>
<tr>
<td>&lt;5 years (n (%))</td>
<td>22 (2.2)</td>
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</tbody>
</table>
Table 2: SMR adjusted for age and period of follow-up on hormone treatment by biological sex in 1331 male-to-female transsexual subjects.

<table>
<thead>
<tr>
<th>Cause of death</th>
<th>Observed cases</th>
<th>SMR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malignant neoplasm</td>
<td>5</td>
<td>0.99 (0.65–1.44)</td>
</tr>
<tr>
<td>Lung</td>
<td>1</td>
<td>1.06 (0.26–3.19)</td>
</tr>
<tr>
<td>Digestive tract</td>
<td>2</td>
<td>2.41 (0.90–5.18)</td>
</tr>
<tr>
<td>Hematological</td>
<td>1</td>
<td>2.86 (0.69–8.57)</td>
</tr>
<tr>
<td>Brain</td>
<td>0</td>
<td>–</td>
</tr>
<tr>
<td>Other: kidney, melanoma, bone, and prostate in MtF. In FtM: leiomyosarcoma</td>
<td>1</td>
<td>0.77 (0.25–1.77)</td>
</tr>
<tr>
<td>Ischemic heart disease</td>
<td>1</td>
<td>1.19 (0.39–2.74)</td>
</tr>
<tr>
<td>Cerebrovascular accidents</td>
<td>0</td>
<td>–</td>
</tr>
<tr>
<td>AIDS</td>
<td>0</td>
<td>–</td>
</tr>
<tr>
<td>Endocrine/diabetes</td>
<td>0</td>
<td>–</td>
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<tr>
<td>Respiratory system diseases</td>
<td>0</td>
<td>–</td>
</tr>
<tr>
<td>Digestive system diseases</td>
<td>1</td>
<td>2.56 (0.62–7.69)</td>
</tr>
<tr>
<td>Genitourinary system disease (ESRD)</td>
<td>0</td>
<td>–</td>
</tr>
<tr>
<td>Nervous system disease (MS)</td>
<td>1</td>
<td>3.57 (0.86–10.7)</td>
</tr>
<tr>
<td>External causes</td>
<td>2</td>
<td>2.22 (1.07–5.44)</td>
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<tr>
<td>Illicit drugs use</td>
<td>1</td>
<td>25.00 (6.00–32.5)</td>
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<tr>
<td>Suicide</td>
<td>1</td>
<td>2.22 (0.53–6.18)</td>
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<td>Unknown/ill-defined symptoms</td>
<td>2</td>
<td>2.08 (0.69–4.79)</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>1.12 (0.89–1.59)</td>
</tr>
</tbody>
</table>

ESRD, end-stage renal disease; MS, multiple sclerosis.
Transmale data

• No difference in all cause mortality compared to population
  – No increased cardiovascular mortality
  – No increased risk of cancer
Transfeminine Hormone Therapy
Androgen Deprivation Therapy

• Adverse Effects
  – Decreased libido, erectile dysfunction, hot flashes, change in body composition, decreased testicle size, gynecomastia
  – Loss of bone mineral density, altered lipid profile, increased insulin level
Cisgender Estrogen

• Primary Ovarian insufficiency (POF)
  – Adverse Affects: heart disease, stroke, cancer

• Hormonal contraception
  – Adverse Affects: heart disease, stroke, VTE

• Postmenopausal Hormone therapy
  – Adverse affects: heart disease, stroke, DVT/PE
  – Estradiol form matters
Form of Estrogen

• Oral
  – First pass effect

• Transdermal
  – Lower CVD risk

• Injection
  – Higher serum levels
Cisgender Estrogen Monitoring

• Primary Ovarian Insufficiency
  – Monitoring: no specific
• Hormonal Contraception
  – Monitoring: no specific
• Menopause Hormone Replacement Therapy
  – Monitoring: routine breast cancer screening, routine cardiovascular disease screening
Transfemal Hormone Monitoring

- Routine cardiovascular screening
- Routine cancer screening
- Serum estradiol, +/- serum testosterone
- If spironolactone, electrolytes
Dutch mortality cross-sex hormones

- Cohort study
- Median follow up 18.5 years
- 966 MtF subjects
- Mortality compared to general population
- Estrogen treatment: injections, oral
  - Ethinyl estradiol
<table>
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<th>Male-to-female transsexuals</th>
<th>Female-to-male transsexuals</th>
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<tr>
<td>n</td>
<td>966</td>
<td>365</td>
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<td>16–76</td>
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<td>3</td>
<td>0.42 (0.28–0.60)</td>
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<tr>
<td>Hematological</td>
<td>6</td>
<td>2.58 (1.97–3.30)</td>
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<td>1.59 (0.95–2.46)</td>
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<tr>
<td>Respiratory system diseases</td>
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<td>0.85 (0.61–1.14)</td>
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<td>3</td>
<td>1.01 (0.68–1.45)</td>
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<td>Genitourinary system disease (ESRD)</td>
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<tr>
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<td>24</td>
<td>7.67 (6.84–8.56)</td>
</tr>
<tr>
<td>Illicit drugs use</td>
<td>5</td>
<td>13.20 (9.70–17.6)</td>
</tr>
<tr>
<td>Suicide</td>
<td>17</td>
<td>5.70 (4.93–6.54)</td>
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<tr>
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<td>21</td>
<td>4.00 (3.52–4.51)</td>
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<tr>
<td>Total</td>
<td>122</td>
<td>1.51 (1.47–1.55)</td>
</tr>
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ESRD, end-stage renal disease; MS, multiple sclerosis.
Transfemal Data

• Mortality: suicide, substance abuse, AIDS
• Risk of clot related to
  – ethinyl estradiol
  – smoking
Compiling the cross sex hormone therapy data

• Life saving treatment!
• Transmasculine hormone therapy
  – No increased mortality
• Transfeminine hormone therapy
  – Non-hormone related mortality
  – Ethinyl estradiol mortality
Primary Care

- Cardiovascular disease
  - Tobacco cessation
- Cancer screening by organs
- STD screening
Cardiovascular disease

• Blood pressure
• Cholesterol
• Diabetes
• Smoking
Cardiovascular disease

• Blood pressure
  – Treatment considerations

• Cholesterol
  – Sex specific calculators

• Diabetes
  – Overweight/obese

• Smoking
  – Increased rates
Cervical Cancer

• HPV vaccination
• Procedure comfort
• Note hormone status on pathology report
Breast Cancer

• Age 50
• Every 2 years
• At least 5 years of hormones
• Other considerations
  – Family history (BRCA)
  – Chest surgery
Organ cancer screening

• Prostate
• Testicle
• Ovary
• Endometrium
Sexually Transmitted Disease

• Sexual practices
  – Multiple partners, condomless sex, transactional sex, sex while intoxicated

• Organs present
  – Oral, rectal, vaginal, prostate
Case example

• Taylor, 35yo transfemale
  – Refill estradiol
  – CVD screening
  – STI screening
• Zach, 32yo transmale
  – Refill testosterone
  – CVD screening
  – STI screening
  – Cervical cancer screening
Learning Points

• Transinclusive history
• Cross sex hormone therapy is safe
• Primary care by risks and organs
References


• Center of Excellence for Transgender Health, Department of Family and Community Medicine, University of California San Francisco. Guidelines for the Primary and Gender-Affirming Care of Transgender and Gender Nonbinary People; 2nd edition. Deutsch MB, ed. June 2016. Available at www.transhealth.ucsf.edu/guidelines.


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• CELESTIA S. HIGANO; Side Effects OF Androgen Deprivation Therapy: Monitoring and Minimizing Toxicity; UROLOGY 61 (Supplement 2A), February 2003; pg 32-38
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