Suddenly on the radar
Why more mainstream?

... we’ve had celebrities come out as transgender in the past .......

what’s different this time?
Access to care has been limited heavily due to lack of physician comfort with topic

The “news item” is that in addition to the general uptick in social liberalism, the topic of transgender medicine has been embraced by the mainstream medical community
Why? ..
...and what’s actually being done?

OUTLINE:

Gender identity –
what’s “state-of-the-art”

Hormonal and surgical Rx – what’s actually happening in 2015
Potential factors determining gender identity:
Background

Potential factors determining gender identity:

1. Environment
2. Societal construct
3. Passive response to anatomy
4. Biological
Potential factors determining gender identity:

1. Environment
2. Societal construct
3. Passive response to anatomy
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Evidence for the biological nature of gender identity

- Historical attempts to manipulate gender identity
- Attempts to find biological associations with gender identity
Bed nucleus of Stria Terminalis smaller in woman and male to female transwomen.

If this biology... what are our Rx options?
Strategy and highlights:
The Boston Globe
December 11, 2011
Strategies

• Adolescents:

Avoid permanent characteristics

Recognize that some young children presenting as transgender are not so as adults

The solution:
Use the existing GnRH agonists paradigm to delay puberty
Primary Treatment Strategy

**Female to male:**

Titrate quickly to male serum testosterone levels –

**Male to female:**

Anti-androgens—essential—

Estrogen -- *may need high doses* - BUT thrombosis risk may rise with dose
Surgical options in 2015

**Female to male:**

-- Chest Reconstruction*
-- Phalloplasty

**Male to female:**

-- Facial Feminization
-- Vaginoplasty*
-- Breast Augmentation
Discordant Sexual Identity in Some Genetic Males with Cloacal Extrophy Assigned to Female Sex at Birth

Reiner, William G.; Gearhart, John P.

Assessed ALL 16 genetic males in their cloacal-extrophy clinic (ages 5-16)
Treatment Strategy

Male to female:

Anti-androgens—essential—spironolactone may require high doses (200+ mg/day) – others OK*.

Estrogen (conjugated and estradiol easiest) - need high doses - BUT thrombosis risk may rise with dose

I start ¼ strength --- Keep serum E2 range 100-200 --
Primary Treatment Strategy

**Female to male:**

Titrate quickly to male serum testosterone levels –
**But NB:** – I start at $\frac{1}{2}$ dose ---

50-100 mg IM testosterone (enanthate or cypionate) q week; gel is fine; patches OK if tolerated; SQ works

Keep serum range 300-1000--
Evidence for determination of GENDER IDENTITY *in utero*

- **X,Y F** \{ Ambiguous genitalia of assorted etiologies \} 5 of 10
- **X,Y M** 2 of 2
- **X,X F** CAH, virilization 3 of 5
- **X,Y F** complete androgen insens. 7 of 7

Slijper FME 1998 *Arch Sex Behav* 27:125-144
Bed nucleus of Stria Terminalis smaller in woman and male to female trans-women

Extension of the cadaver data with MRI

Dynamic

Bergland H, et al *Cerebral Cortex* 2008

Static

In a large Dutch study:

of 1285 patients, 99+% were satisfied with the gender change decision.

van Kesteren PJ 1996 Arch Sexual Behavior 25:589-600