Objectives

- Basics of Gender Dysphoria
- Assessment of transgender youth
- Services that BCCH Endocrinology can provide
- Treatment options

Sex vs Gender

- Sex
  - Biological
    - Chromosomes
    - Sexually dimorphic anatomy and physiology
- Gender
  - Social construct
    - What society, culture, family & peers consider typical for males or females
  - More fluid and can change rapidly
Gender Identity vs Gender Role

- Gender Identity
  - Inner or personal sense of maleness/femaleness
  - More fluid in young children
- Gender role
  - Outward manifestation
    - Behaviour, speech, clothing, toy and game preference
    - Controllable and adaptable
  - May not be congruent with Gender Identity
Gender Fluid

- A person who feels fluid or flexible within the spectrum of male to female
- May change rapidly or over many years
- More common in natal females

Cisgender vs Transgender

- Cisgender
  - Sex and gender identity are congruent

- Transgender
  - Sex and gender identity are non-congruent
  - Non-congruence can vary

Gender Identity Development

- Complex process
- Interaction between multiple factors
  - Individual
  - Biology
  - Family and society
  - Cognitive development
- Starts early
  - Old theory of gender neutrality at birth
  - Evidence that there are differences from birth
Prevalence of Gender Dysphoria

• Difficult to assess
  – Adult natal males 1:7000 to 1:20 000
  – Adult natal females 1:33 000 to 1:50 000
• Massachusetts 18-64yo (n=28662)
  – 0.5% identified as transgender
• Prevalence estimates in Singapore and Thailand are higher
Sex Differences

• Children
  – Sex ratio 4.7:1 ♂:♀
• Adolescents
  – Sex ratio 1.3:1 ♂:♀
• There are differences in sex ratio between countries
  – Toronto, Canada, 5.8:1 ♂:♀
  – Utrecht, Netherlands, 2.9:1 ♂:♀
• Girls referred later and had better peer relations
  – Even though more likely to meet DSM criteria

Ultimately

• Gender development is a mix of nature, nurture and culture
• Interplay of gender identity and gender role
• As society becomes more open and supportive of gender diversity it is likely that more children who are ‘gender nonconforming’ will present

Treatment

• Prevent the harmful effects of persistent gender dysphoria
  – Psychological stress and anxiety
  – Depression
  – Self harm
  – Suicide
    • Ideation 45% and 26% attempt suicide
    – Oppositional defiance
  – Lower school performance
  – Drug and alcohol abuse
Treatment

- Guided by a number resources
  - WPATH SOC7
  - Endocrine Society Clinical Practice Guidelines

- As Endocrinologists we are heavily guided by the diagnosis and recommendations from Mental Health professionals before proceeding with treatment

Dutch Approach

- Do not recommend a complete social transition before early puberty
  - Can be hard for those children that desist
  - Some children barely realise that they are of the other natal sex
    - Can make later treatment difficult
- Encourage a middle of the road approach
  - Remain in contact with children and adult role models of their natal sex
  - Encourage a wide range of interests
  - Accept and support but protect and remain realistic
    - Appropriate limit setting
    - Accepting the uncertainty can be difficult

BCCH Endocrine Transgender Services

- Access requires a referral
- Medical
  - Endocrinologist and supporting Fellows
  - Nurse Clinician
  - Social Worker with counselling experience
  - Unfortunately no mental health services in our clinic
- Liaise with BC Trans Clinical Care Group
- Liaise with VSB Anti-homophobia and Diversity Mentor
Mental Health Services

- **Lower Mainland**
  - Chris Booth, North Vancouver, Psychiatry*
  - BCCH Mental Health, Vancouver, Psychiatry*
  - Melady Preece, Vancouver, Psychology
  - Wallace Wong, Surrey, Psychology*
- **Interior**
  - Trevor Corneil, Kelowna, Psychology*
- **Vancouver Island**
  - Magali Bruot, Victoria, Psychology
  - Tim Paré, Campbell River, Psychology*

Role of Mental Health

- Diagnosis
- Psychotherapy as needed
- Family support
- Evaluation for social transitions
- Readiness for medical and surgical interventions

Assessment Algorithm

- Child Gender Dysphoria Consultation
- Adolescent or Tanner Stage 2 Psychiatric and/or psychological assessment including major tasks for assessment of child
- Treatment with mental health care professional
  - If close to puberty, consider referral to Endocrinology for consideration of pubertal suppression
- Longstanding GD, engaged in "real life experience", and minimal psychiatric and psychosocial concerns
- Coexisting psychopathology, or more recent onset of gender dysphoria
  - Referral to Endocrinology for consideration of pubertal suppression + Psychotherapy
  - Consider multidisciplinary assessment (i.e. psychology, social work, Dr. Booth) + Psychotherapy + Consider referral to Endocrinology for consideration of pubertal suppression
Treatment Algorithm

Treatment

- Prepubertal
  - No agreed treatment
  - Support to family and school
- Early puberty
  - GnRH agonist
- Later puberty
  - Menstrual suppression
  - Testosterone blockers
  - Role of GnRH agonist
  - Cross hormone therapy

GnRH agonist

- Start when Tanner stage 2
  - Allows some gonadal hormone exposure
  - Most adolescents with GD will persist
  - Give time to explore gender identity and reduce stress
  - Stop development of secondary sexual characteristics
- Concerns
  - Bone mineral density
    - Slowing of accrual but progresses normally during sex steroid treatment
    - Low BMD in adult MTF in some studies
  - Fertility compromised
  - Unknown effects on brain development
  - Long term safety
Cross Hormone Therapy

• Generally recommended from 16 years of age
  – Related to development and age of consent in most countries
• Delay in starting hormones can cause distress
  – Puberty is out of sync with peers

Some controversy

• Arguments against treatment
  – Diagnosis of GD can’t be made in adolescence because of their developmental phase
  – Puberty suppression will inhibit spontaneous formation of a gender identity congruent with the natal sex
• Delaying treatment is not a neutral option
  – Psychological burden
  – Future surgical burden
References

- Steensma, T. et al, Hormones and Behavior, Gender identity development in adolescence, 2013 64, 288-297
- Miller, B, Current Problems in Child and Adolescent Health Care, Gender identity disorder in children and adolescents, 2009, 117-143