

HORMONES – AN INTRODUCTION

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The Evandale Practice

CRITERIA FOR GENDER-AFFIRMING HORMONE THERAPY FOR ADULTS

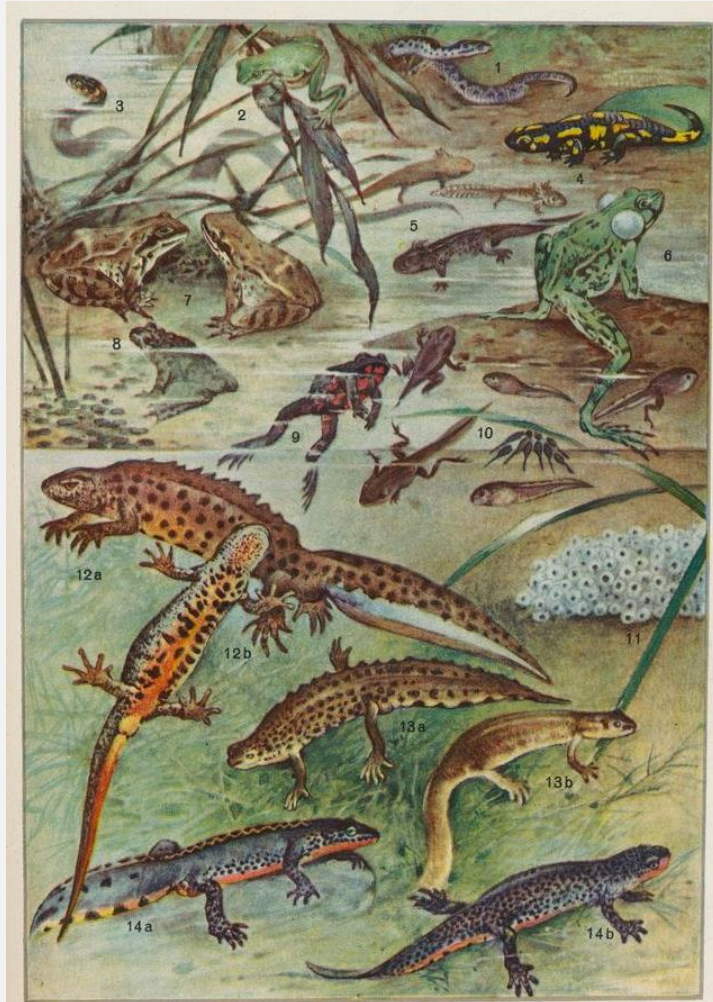
1. Persistent, well-documented gender dysphoria
2. Capacity for informed consent
3. Legal majority
4. Mental health concerns, if present, must be reasonably well controlled

“READY AND SUITABLE”

- Ready
 - Emotional
 - Housing
 - Relationships
 - Work/Education
 - Resources
- Suitable
 - ‘Diagnosis’
 - Exclude medical contraindications
 - Exclude psychiatric reasons for gender identity
 - Mental health well-controlled



BIOCHEMICAL GOALS



- Transgender men
 - Physiological levels of testosterone
 - 15-35nmol/L
 - Reduce oestrogen production
- Transwomen
 - Physiological levels of oestradiol
 - 350-750pmol/L
 - Testosterone levels in pre-menopausal female range
 - <2nmol/L

GOALS OF HORMONE THERAPY

- “Acquisition of the secondary sex characteristics of the other gender to the fullest extent possible”

Gooren in Ettner, Monstrey, Coleman 2016



GOALS OF HORMONE THERAPY

- Something else...
- Individual goals
- Tailored approach
- Iterative process



GOALS OF HORMONE THERAPY

Hormone therapy may not be needed or wanted



EXPECTATIONS

”The only benefit that sex reassignment can off is relief from gender dysphoria; all human problems outside this arena will remain”

Gooren in Ettner, Monstrey, Coleman 2016

HORMONES CANNOT CHANGE...

Skeletal features

Masculinised voice

Adam's apple

Pelvic configuration

Height

Androgenised facial hair

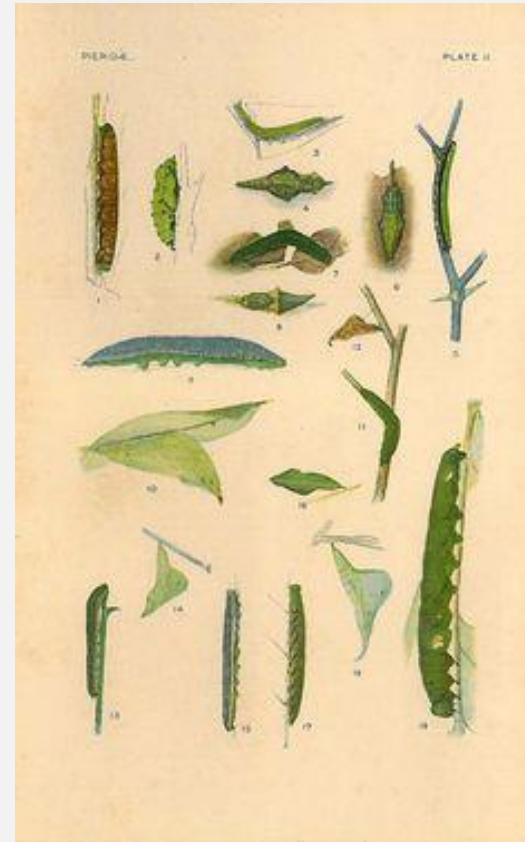


TABLE 1B: EFFECTS AND EXPECTED TIME COURSE OF FEMINIZING HORMONES ^A

Effect	Expected Onset ^B	Expected Maximum Effect ^B
Body fat redistribution	3-6 months	2-5 years
Decreased muscle mass/ strength	3-6 months	1-2 years ^C
Softening of skin/decreased oiliness	3-6 months	unknown
Decreased libido	1-3 months	1-2 years
Decreased spontaneous erections	1-3 months	3-6 months
Male sexual dysfunction	variable	variable
Breast growth	3-6 months	2-3 years
Decreased testicular volume	3-6 months	2-3 years
Decreased sperm production	variable	variable
Thinning and slowed growth of body and facial hair	6-12 months	> 3 years ^D
Male pattern baldness	No regrowth, loss stops 1-3 months	1-2 years

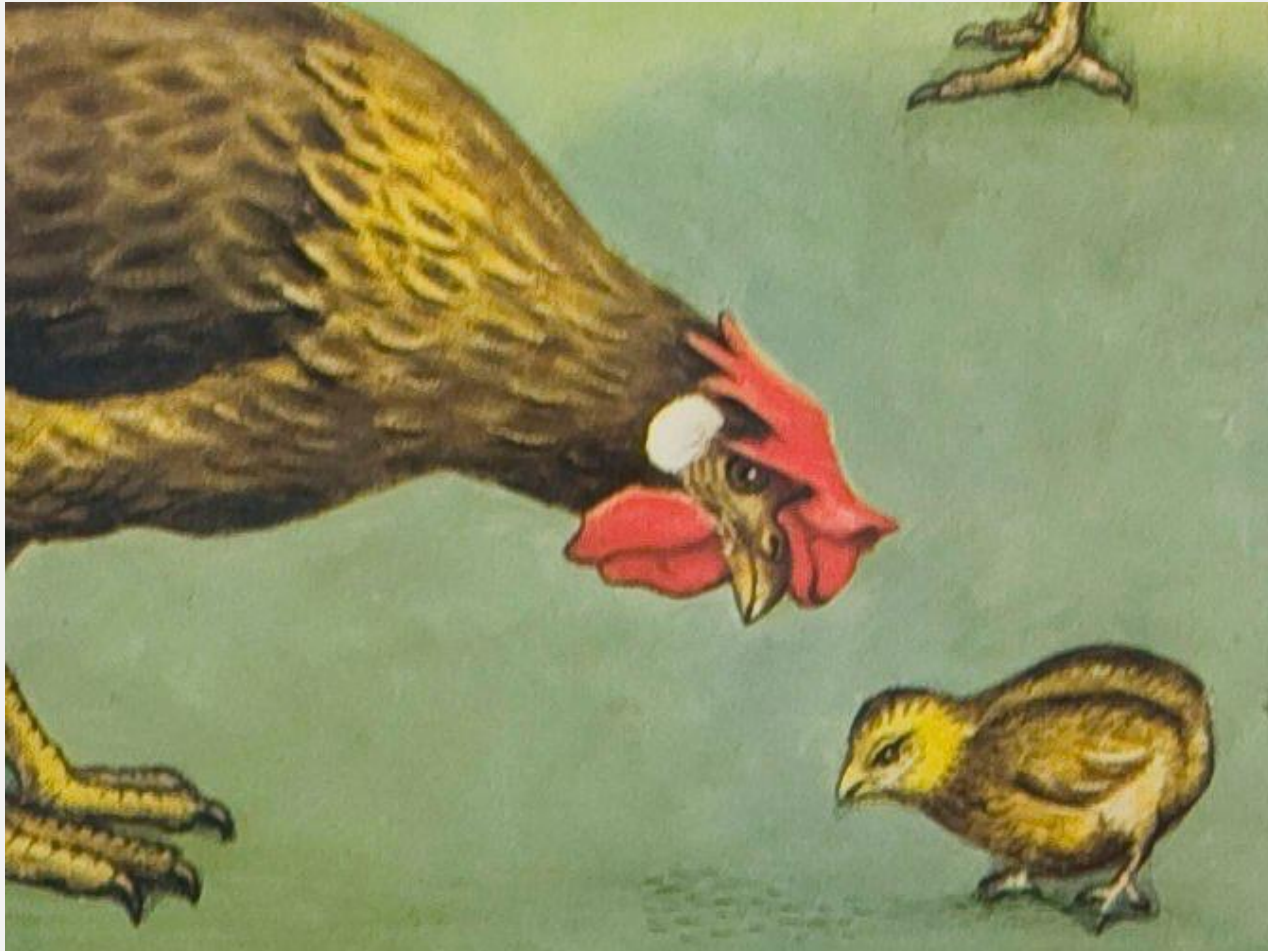
^A Adapted with permission from Hembree et al. (2009). Copyright 2009, The Endocrine Society.

^B Estimates represent published and unpublished clinical observations.

^C Significantly dependent on amount of exercise.

^D Complete removal of male facial and body hair requires electrolysis, laser treatment, or both.

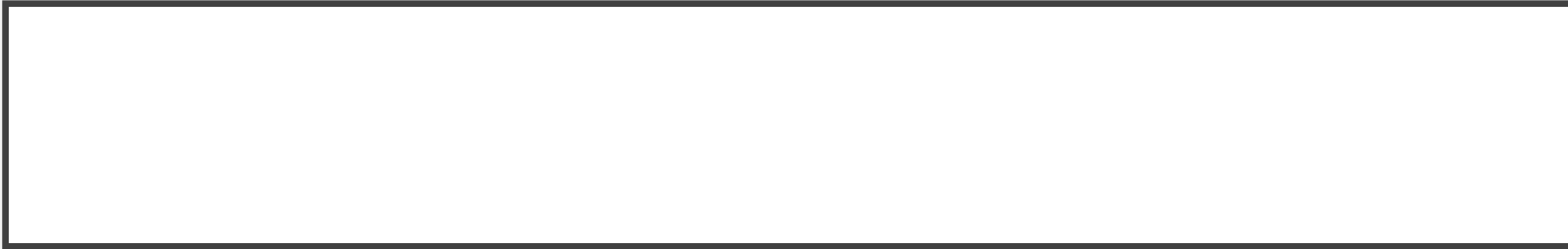
FERTILITY





WORK-UP

- Medical history
- VTE
- CVD
- Breast cancer
- Migraine
- Osteoporosis



- Examination
 - Thorough
 - Height, weight, waist
 - Cardiovascular
 - Respiratory
 - Gastrointestinal
 - Consider genital examination

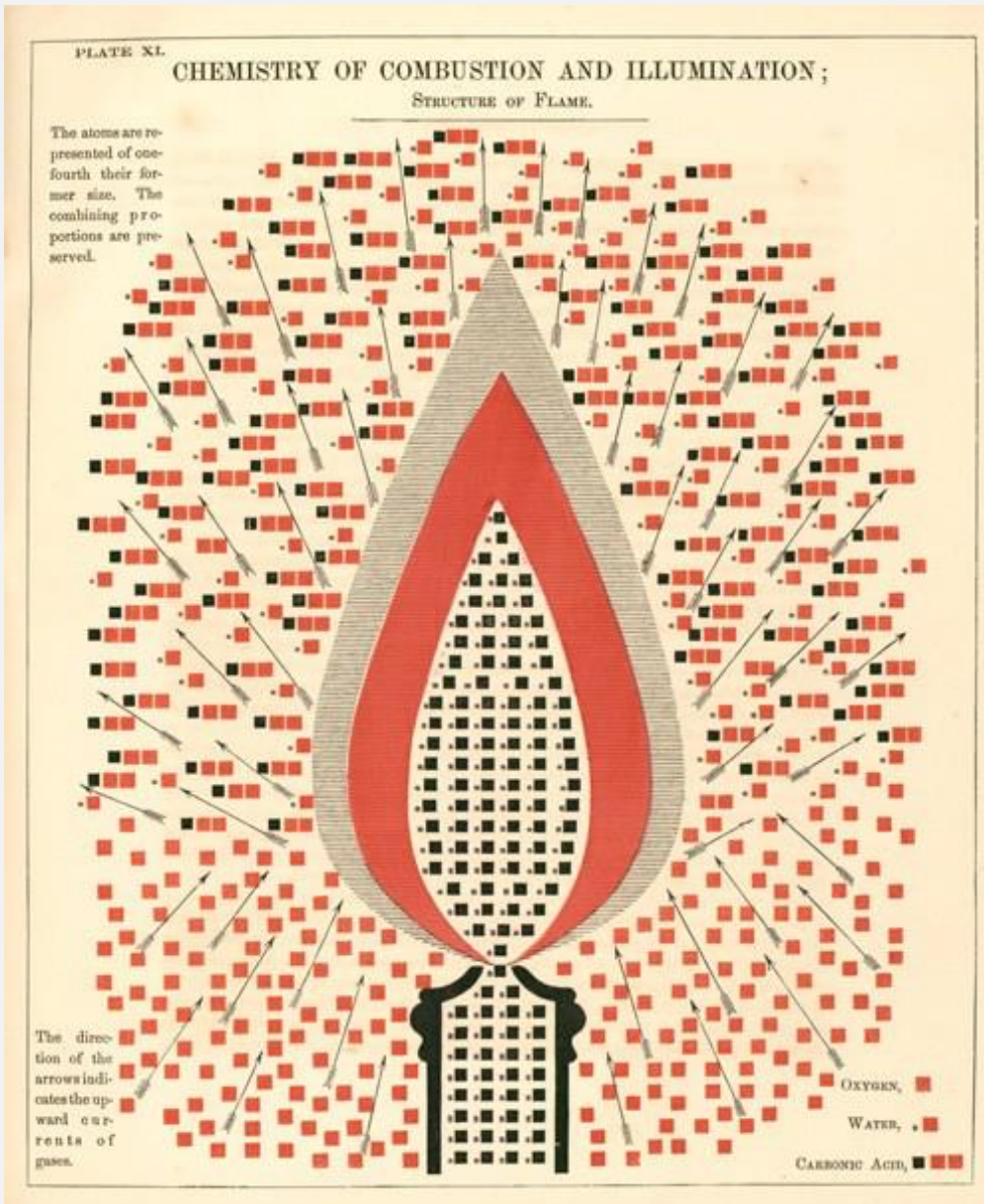


- Investigations
 - FBC
 - ELFTs
 - FSH and LH
 - Prolactin
 - Oestradiol
 - Testosterone +/- SHBG
 - Lipids
- Consider
 - Karyotype
 - Coagulopathy screen
 - Others ...

MENTAL HEALTH



- Pre-existing conditions
 - Highly prevalent
 - Depression
 - Anxiety
 - Personality
- Effects of hormones
- Adjustment



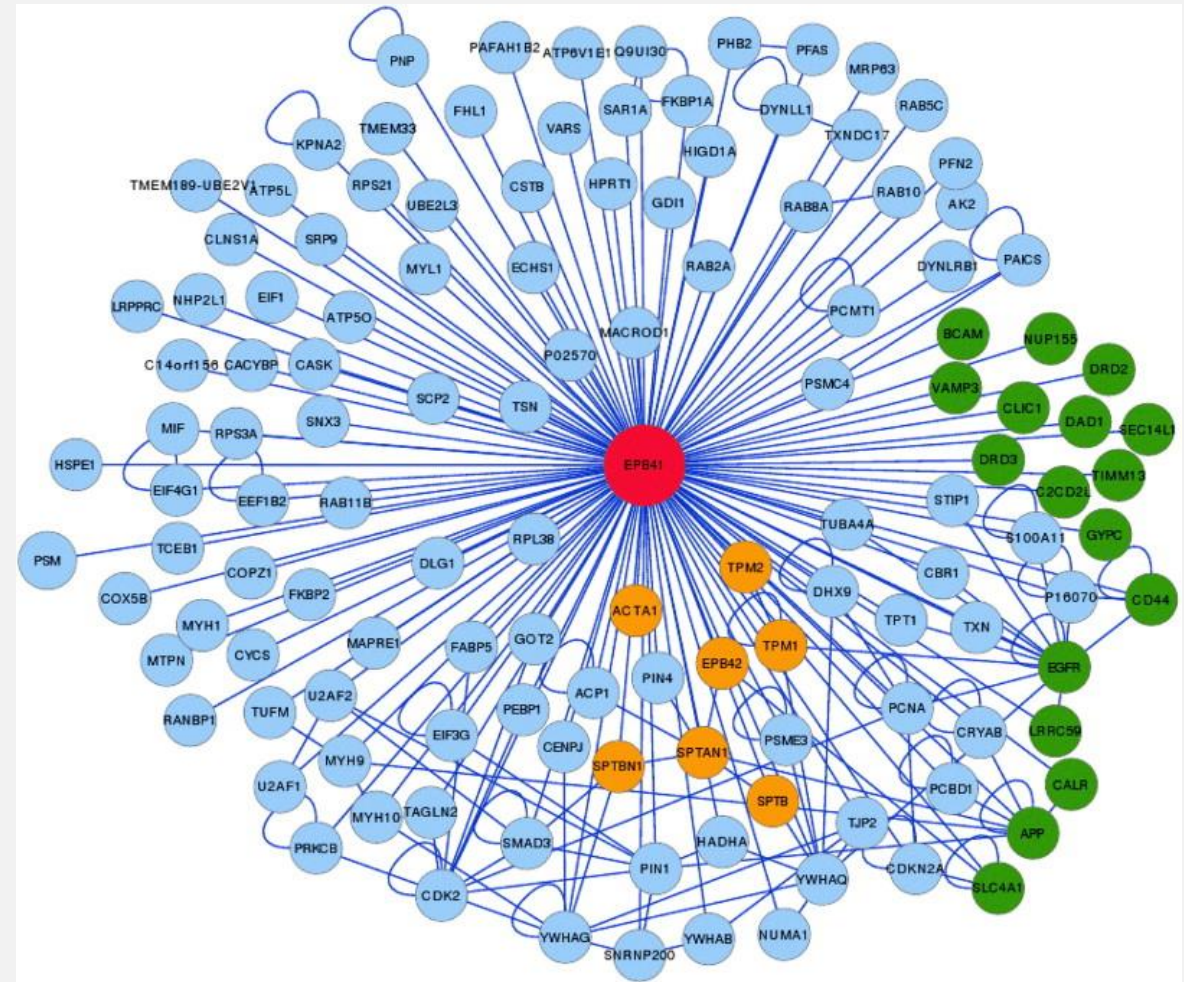
MONITORING

Initially frequent, reducing to 6 monthly

- Potassium
- FBC
- LFTS
- Renal function
- Prolactin – yearly
- Lipids – 2nd yearly
- Hormones
- LH

COLLABORATION

- Interdisciplinary
 - Hormone provider
 - Mental health provider
 - Community
 - Others



GUIDELINES

- Endocrine Society Guidelines 2017
<https://academic.oup.com/jcem/article/102/11/3869/4157558>
- WPATH Standards of Care
http://www.wpath.org/site_page.cfm?pk_association_webpage=3926&pk_association_webpage_menu=1351
- Adolescents
 - Australian Standards of Care and Treatment Guidelines 2017
<https://www.rch.org.au/uploadedFiles/Main/Content/adolescent-medicine/Australian%20Standards%20of%20Care%20and%20Treatment%20Guidelines%20for%20Trans%20and%20Gender%20Diverse%20Children%20and%20Adolescents.pdf>

QUESTIONS

