A landscape painting by Claude Monet, featuring a path through a green field with trees and a cloudy sky.

Antiandrogens

Stuart Aitken

Role of antiandrogens

- Fat redistribution
 - Breast growth/hips/contours
- Hair
 - Distribution/Texture/Growth
- Skin
 - Texture/seborrhoea
- Primary sex
 - Shrinkage of penis and testes
 - Reduced erections
- Psychological
 - Reduced libido



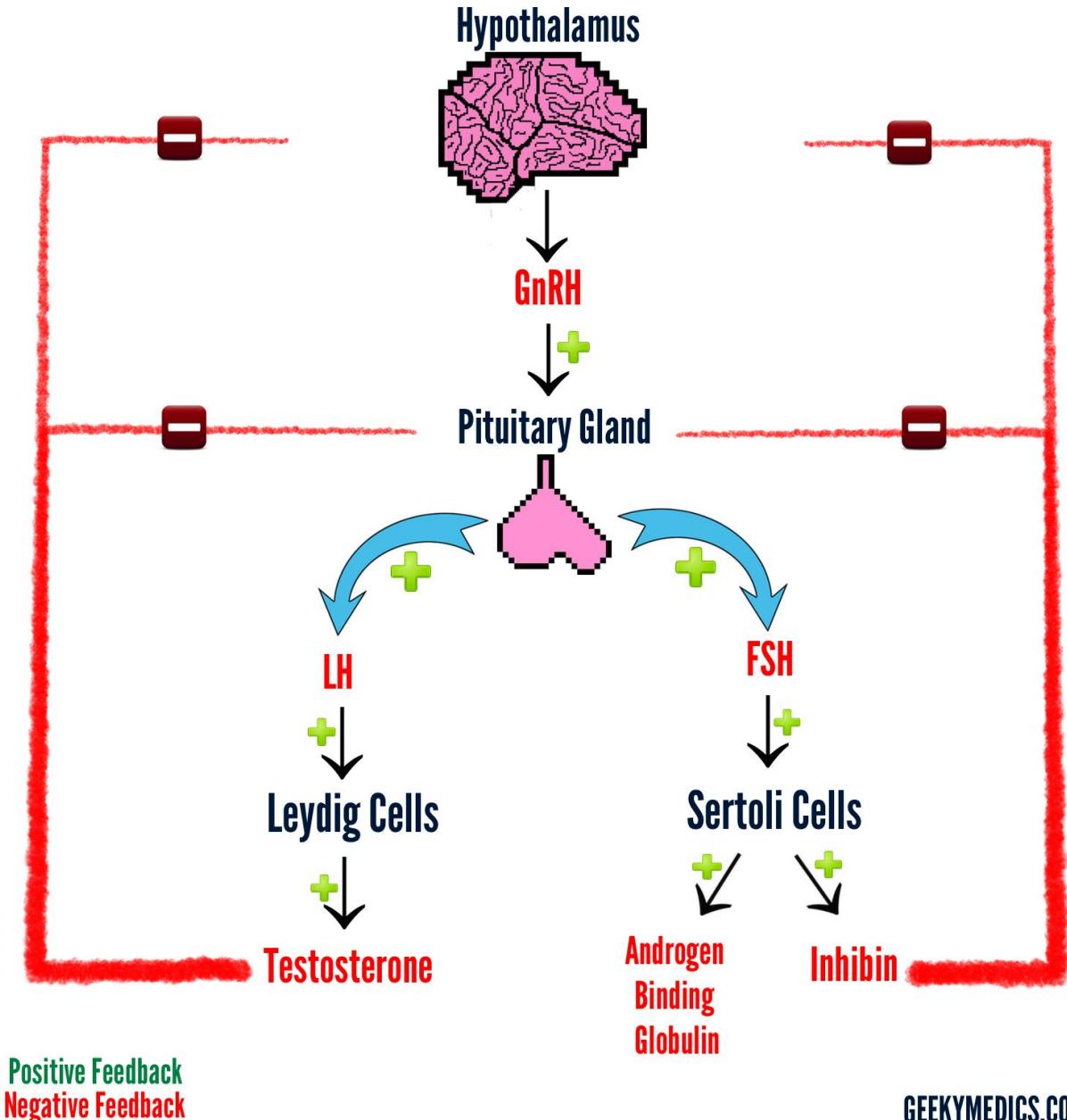
What they cannot do



- Reverse skeletal changes
- Reverse cartilaginous changes
- Reverse vocal changes
- Change some hair features
- Provide reliable contraception

Pharmacology

- GnRH agonists
- Progestagens
- 5- α reductase inhibitors
- Androgen receptor blockers
 - Steroidal
 - Nonsteroidal



Spironolactone



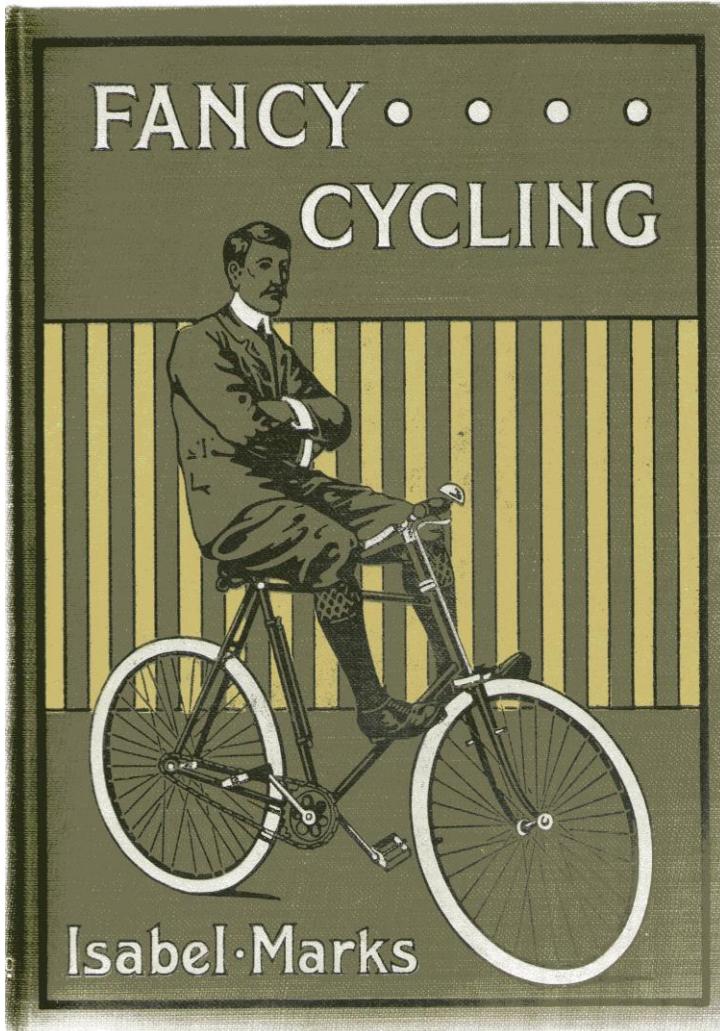
- K⁺ sparing diuretic
- Aldosterone antagonist
- Peripheral testosterone receptor blockade
 - Increases SHBG
 - Increases hydroxylase activity
 - Weak inhibition of 5- α reductase
- 100-300mg daily
- Hyperkalaemia
- Renal impairment
- Hypotension

Cyproterone

- Progestagen
- Actions
 - Reduces LH
 - Peripheral AR antagonist
- Doses
 - 25-200mg
- Precautions
 - Liver dysfunction/failure
 - Depression/tiredness
 - VTE



Bicalutamide



- Androgen receptor blocker
 - Silent agonist
 - Non-steroidal
- Precautions:
 - Rare liver failure
 - QTc prolongation
 - Cyp3A4 inhibitor
- More potent than flutamide

Resources



- Hembree W et al. Endocrine treatment of transsexual persons an Endocrine Society Clinical Practice Guideline. *J Clin Endocrinol Metab* 2009; 94(9): 3132-54
- LiverTox resource: www.livertox.nih.gov
- Wilson JD, Roehrborn C. Long-term consequences of castration in men. *J Clin Endocrinol Metabolism* 1999;84(12): 4324-31
- Transgender Medicine and Surgery. 2nd edition. Ettner R, Monstrey S, Coleman E (eds). Routledge 2016