



CLINICAL EFFECTIVENESS OF BILATERAL ORCHIECTOMY IN REDUCING ANTI-ANDROGENS IN TRANSGENDER FEMALES

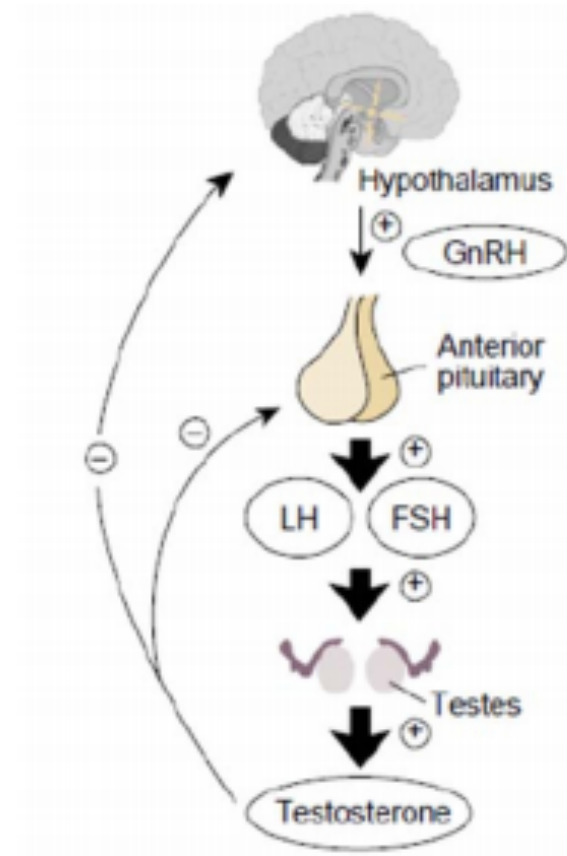
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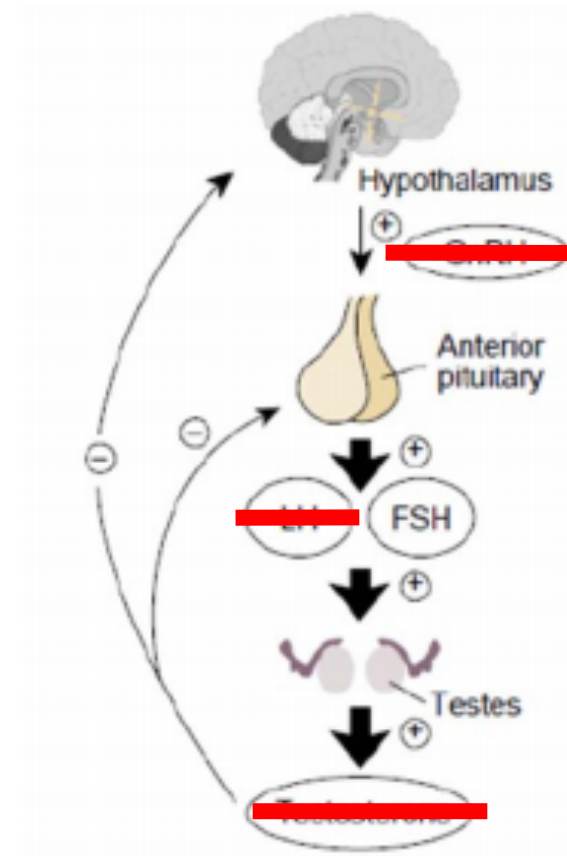
Disclosures

I have no special interests to disclose.

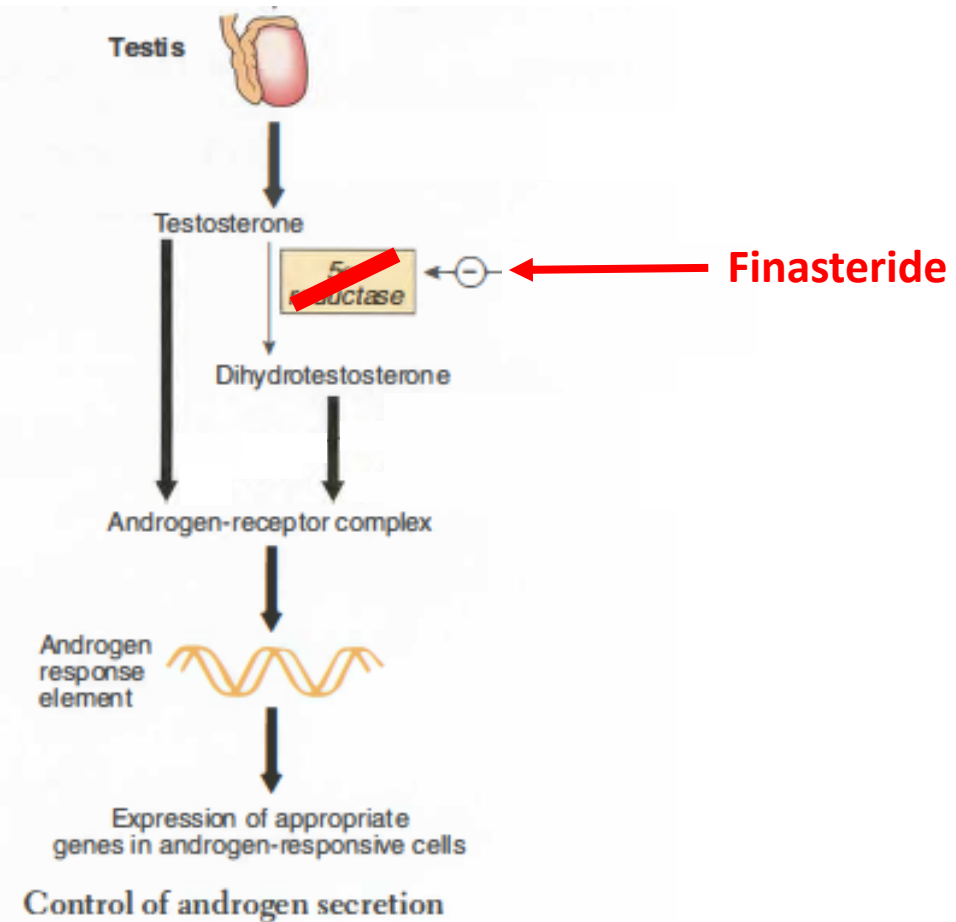
Hormone Manipulation in Transwomen



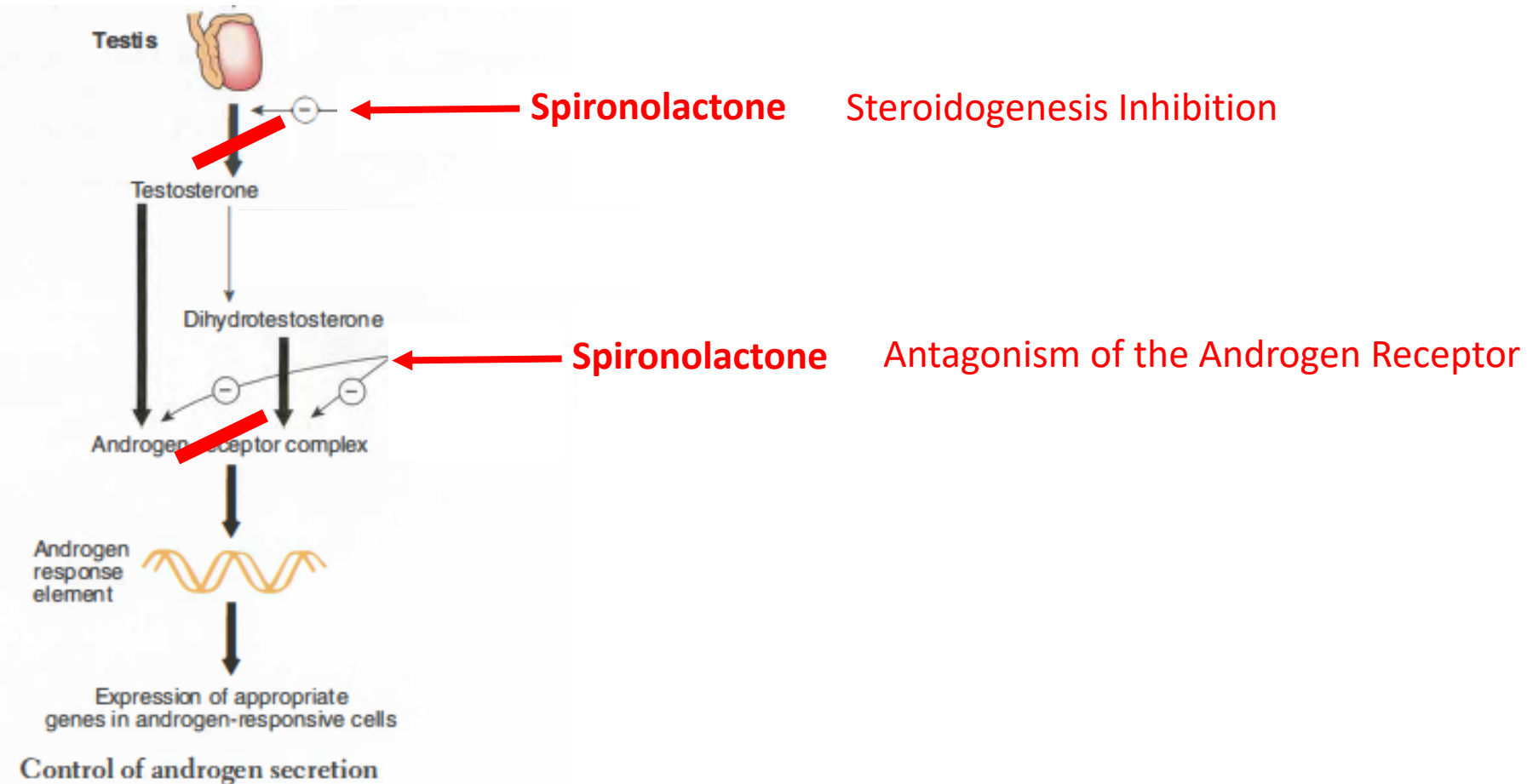
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Orchiectomy

Bilateral orchiectomy (BO) has been used as an alternative means of reducing anti-androgen medications.

However, actual changes in hormone medication regimens have not been well reported.

Methodology

Utilized ICD codes to identify patients with Gender Dysphoria (GD) treated at our institution between 2008 and 2018.

We included those who underwent bilateral orchiectomy as part of their treatment for GD.

Requirements for Orchiectomy

WPATH

1. Persistent, well-documented GD
2. Capacity to give informed consent
3. Legal Adult
4. Well controlled comorbidities, including mental health issues
5. At least 1 year of continuous hormone therapy
6. Referrals from 2 separate mental health professionals

Results

A total of 19 patients underwent BO as part of their treatment for GD. Of these, 16 had documentation of their hormone regimen prior to surgery.

Pre- and post-op medication regimens were available for 12 patients.

Median age at time of surgery was 46 years. Median time on hormone therapy prior to surgery was 42.5 months.

Patient Demographics of Transwomen Undergoing Orchiectomy	
Age at Surgery	
Median (Range)	46 (30-65)
Race	
White	13 (81.3%)
Black	1 (6.3%)
Other	2 (12.5%)
Previous Children	
Yes	7 (43.8%)
No	9 (56.3%)
Months on Hormone Therapy	
Median (Range)	42.5 (1-306)
Provider Managing Hormones	
Endocrinology	7 (43.8%)
Gynecology	8 (50.0%)
Outside Provider	2 (12.5%)
Primary Anti-Androgen Therapy	
Spironolactone	14 (87.5%)
Bicalutamide	1 (6.3%)
Leuprolide	1 (6.3%)
5α-Reductase Inhibitor Use	
Yes	2 (12.5%)
No	14 (87.5%)

Changes in Hormone Medication Regimen Before and After Bilateral Orchiectomy*

Patient #	Pre-op AAT	Post-op AAT	Pre-op Estrogen	Post-op Estrogen
1	Spironolactone 200 mg PO	-	Estradiol cypionate 2 mg IM weekly	Estradiol cypionate 1.5 mg IM weekly†
2	Spironolactone 100 mg PO	-	Estradiol 4 mg PO	Estradiol 4 mg PO
3	Spironolactone 50 mg PO	-	Estradiol valerate 10 mg IM twice weekly	Estradiol valerate 10 mg IM twice weekly
4	Spironolactone 200 mg PO	-	Estradiol patch 0.1 mg twice weekly	Estradiol 3 mg PO
5	Spironolactone 200 mg PO Finasteride 5 mg PO	- Finasteride 5 mg PO	Estradiol 4 mg PO	Estradiol 4 mg PO
6	Spironolactone 100 mg PO	-	Estradiol 6 mg PO	Estradiol valerate 8 mg IM weekly
7	Spironolactone 100 mg PO Finasteride 5 mg PO	- -	Estradiol 6 mg PO	Estradiol 2 mg PO†
8	Spironolactone 100 mg PO	Spironolactone 100 mg PO	Estrogens conjugated 2.5 mg PO	Estradiol 4 mg PO
9	Spironolactone 300 mg PO	-	Estradiol 6 mg PO	Estradiol 4 mg PO†
10	Spironolactone 100 mg PO	-	Estradiol 1 mg PO	Estradiol 2 mg PO
11	Spironolactone 200 mg PO	-	Estradiol 6 mg PO	Estradiol 6 mg PO
12	Bicalutamide 12.5 mg PO	-	Estradiol valerate 5 mg IM weekly	Estradiol valerate 5 mg IM weekly

*Oral formulations are expressed as total daily dose

†Denotes decrease in estrogen dose

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Patients with Pre- and Post- Orchiectomy Medication Regimen Information Available
n = 12

Secondary AAT with Finasteride
n = 2

Stopped
n = 1

Continued
n = 1

Primary AAT
n = 12

Spirolactone Pre-op
n = 11

Stopped
n = 10

Continued
n = 1

Bicalutamide Pre-op
n = 1

Stopped
n = 1

Continued
n = 0

Estrogen Therapy
n = 12

Decreased Dose
n = 3

Continued Dose
n = 9

Conclusions

BO is an effective means of lessening ongoing hormonal medication for the majority of transgender female patients.

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- ❖ Anti-Androgen: 92% were able to stop post-operatively.
- ❖ Estrogen: 25% reduced exogenous estrogen doses.

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