Late onset hypogonadism/ Low testosterone in men

Disclaimer:
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References:
1. NB Medical
2. GP Update
3. Endocrinology consultant, RCGP lecture, Sept 2016
4. Urology consultant, lecture, Nov 2016

Symptoms

sexual
- ↓ libido.
- ED.
- Loss of nocturnal erections.
- Poor response to PDE5 inhibitors.

non-sexual
- Fatigue.
- ↓ muscle mass.
- Loss of body hair.
- Flushes.
- Sweats.
- Low mood/depression.

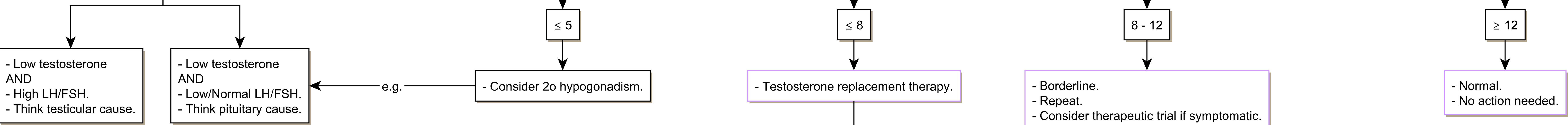
Investigations

- Testosterone.
  - Serum testosterone on two occasions.
  - Between 7am and 11am.
  - Not fasted.
- LH, FSH.
- Prolactin.
- TSH, T4.
- FBC.
- PSA.

Management

LH, FSH, prolactin

Testosterone



- Assess risk of prostate Ca.
  - PSA.
    - If > 4, refer.
    - If > 3 in Afro-caribbean, refer.
    - If FHx, refer.
  - PR exam of prostate.
- Ensure no contraindication.
  - Severe LUTs.
  - Haematocrit >50%.
  - Untreated sleep apnoea.
  - Untreated cardiac failure.
  - Prostate Ca.
  - Breast Ca.
- Counsel s/e.
  - Oedema.
  - Prostatic growth, rise in PSA and progression of subclinical prostate Ca.
  - Gynaecomastia.
  - IHD, epilepsy, migraine and sleep apnoea may be aggravated by treatment.
  - Long-term use may lead to retention of Na, K, PO4, Ca and fluid.
  - Hypertension.
  - Oligo- and azospermia.
  - Priapism.
- Monitoring.
  - Aim for total testosterone ≥ 15.
  - Monitor PSA.
    - Monitor at 3/12, 6/12, and 1yr.
    - Then annually.
    - If PSA rises >1.4 in any year, or at a rate >0.4 per year, stop and refer to urology.
  - Monitor FBC.
    - Monitor for erythrocytosis
    - Check at 3/12 and then annually.
    - Keep haematocrit below 52%.
  - If failure to benefit at 6/12 stop treatment.
  - i.e. No improvement in:
  - Libido.
  - Sexual function.
  - Muscle mass.