Pre-referral investigations

Approximately 80% of all endocrine referrals in secondary care involve a dozen or so common themes, seen reasonably often in primary care for which some pre-investigation may be performed. Although it is desirable to have appropriate investigations prior to referral, this may not be feasible with GP workload, lack of certainty over appropriate testing or lack of access to certain tests.

Presentation Male hypogonadism
Note Testosterone has diurnal variation and typically peaks early morning if patient has a normal sleep-wake cycle. (Caution of timing of tests is needed especially in night/shift workers). The testosterone level can be affected by stress, intercurrent illness and shift working and testing in these periods should be avoided if possible.
First line investigations 9 am (fasted sample if possible) testosterone with SHBG, LH, FSH, prolactin, TSH, Routine bloods to exclude intercurrent illness- liver function, renal function, full blood count. +/- If gynaecomastia present- oestradiol level
Second line investigations (could be facilitated by secondary care local agreement) Repeat 9 am testosterone with SHBG, LH, FSH, prolactin, if abnormality on first set to confirm biochemical abnormality.
Actions Address any abnormality identified as appropriate
Referral to endocrinology if Any endocrine test abnormal unless abnormality can be addressed in primary care
Key information to include in referral: Clear history of symptoms, e.g. erectile dysfunction, libido, body hair distribution, gynaecomastia Developmental history, e.g. delayed puberty Relevant past medical history: e.g. undescended testis, mumps infections, genital trauma, Medication including if previous chemotherapy, radiotherapy, access to anabolic steroids or testosterone replacement previously Blood work up and any second line investigations Examination if performed.
Consider referral to other services if: Testicular lump/mass- to urology not endocrinology Patient wishes to investigate fertility –semen analysis may be indicated and performed by primary care or other service depending on local set up
Red flags to prompt urgent referral Testicular lump/mass- to urology not endocrinology