Investigation of Hyperprolactinaemia

First-time elevated prolactin (>324IU/L in men and >496IU/L in women)

Exclude physiological and pharmacological causes

Physiological Causes:
Coitus, Exercise, Lactation, Pregnancy, Sleep, Stress

Pharmacological Causes:
Anaesthetics, Anti-convulsants, Anti-depressants, Anti-Emetics, Anti-histamines,
Anti-hypertensives, Cholinergic agonist, Catecholamine depleatory agents,
Dopamine receptor blockers, Dopamine synthesis inhibitors, Oestrogens,
Neuroleptics/ anti-psychotics, Neuropeptides, Opiates and opiate antagonists,
Risperidone

*Note: Hyperprolactinaemia is typically associated with CKD stages 4 and 5. However, it is unclear at which threshold of kidney dysfunction prolactin begins to rise. Very mild degrees of renal impairment probably do not elevate prolactin.

Repeat prolactin measurement after the patient has rested quietly for 30 minutes.
Exclude hypothyroidism and renal impairment* by requesting TSH and UE (if not performed within previous 8-12 wks)
Consider polycystic ovarian syndrome (Are there clinical or biochemical signs of androgen excess?)

Note: If discontinuing/adjusting medication please allow 4 – 6 weeks before sample collection.

Persistent elevation in prolactin

Consider analytical interference especially if the patient is asymptomatic. Telephone the laboratory on 01904 726366 to discuss further investigation.

Consider other causes of hyperprolactinaemia

Perform a baseline pituitary profile on a sample collected at 9am if not performed previously (cortisol, IGF1, FSH, LH, testosterone (males), oestradiol (females)). Note: Further investigations may be added by the Duty Biochemist where appropriate

Consider referral to endocrinology

Consider discussion with an endocrinologist if:
Prolactin is >2500IU/L
Signs and symptoms are suggestive of pituitary stalk compression or hypopituitarism/ hypogonadism
Patient is being investigated for infertility

Note: The lab will automatically undertake investigation to exclude analytical interference when prolactin is >1500IU/L. An appropriate comment will be added to the report.

Hypothalamic-pituitary stalk damage:
Granulomas, Infiltrations, Irradiation, Rathke’s cyst, Trauma, Tumours

Pituitary:
Acromegaly, Lymphocytic hypophysitis or parasellar mass, Macroadenoma, Plurihormonal adenoma, Prolactinoma, Surgery, Trauma, Idiopathic

Systemic disorders:
Chest pathology (Neurogenic chest wall trauma, surgery, herpes zoster), Cirrhosis, Cranial radiation, Epileptic seizures, Pseudocyesis