

DISCIPLINE: ENDOCRINE

Key points in anatomy and physiology

Gland

Hypothalamus – GnRH (Gonadotrophin Releasing Hormone), TRH (Thyrotropin – Releasing Hormone), Dopamine, GHRH (Growth Hormone Releasing Hormone), Somatostatin, CRH (Corticotropin Releasing Hormone)

Pituitary – GH (Growth Hormone), TSH (Thyroid Stimulating Hormone), Prolactin, FSH (Follicle Stimulating Hormone), LH (Luteinizing Hormone), ACTH (Adrenocorticotrophic Hormone)

Posterior Pituitary – Oxytocin, ADH (Antidiuretic Hormone) [Vasopressin]

Thyroid - Thyroxine

Parathyroid – Parathyroid Hormone

Pancreas – Insulin, Glucagon, Somatostatin

Adrenals – Cortisol, Aldosterone, DHEA (Dihydroepiandrosterone)

Gonads

Testes - Testosterone

Ovaries – Oestrogen, Progesterone

Autocrine

Paracrine

Endocrine

Vitamin D

Noradrenaline (NA)

Triiodothyronine

History Taking

Major presentations of disease

- Alopecia
- Amenorrhoea
- Angina
- Ankle swelling
- Anorexia
- Anxiety
- Apathy
- Bruising
- Carpal Tunnel Syndrome
- Cataracts
- Central Obesity
- Constipation

- Deafness
- Decreased Skin Thickness
- Depression
- Diarrhoea
- Diplopia
- Dry Hair
- Dry Skin
- Excessive Lacrimation
- Fatigue
- Galactorrhoea
- Gynaecomastia
- Hair Thinning
- Heat/Cold Intolerance
- Hypercalcaemia
- Hyperglycaemia
- Hyperkalaemia
- Hypoglycaemia
- Hyponatraemia
- Impotence
- Infertility
- Irritability
- Loss of libido
- Loss of secondary sexual characteristics
- Loss of visual acuity
- Menorrhagia
- Moon Face
- Muscle stiffness
- Muscle weakness
- Palpitations
- Peptic Ulceration
- Pigmentation
- Postural Hypotension
- Primary/Secondary Amenorrhoea
- Pruritis
- Psychosis
- Renal Colic
- Shock

- Steatorrhea
- Striae
- Sweating
- Tremor
- Vomiting
- Weight loss/gain
- Retinopathy
- Nephropathy (Diabetic)
- Peripheral Neuropathy
- Diabetic Foot Disease

Differential Diagnosis – common clinical conditions

Pituitary

- Pituitary Adenoma
- Pituitary Insufficiency (post trauma)
- Acromegaly
- Craniopharyngioma
- SIADH (Syndrome of Inappropriate Anti-Diuretic Hormone release)
- Diabetes Insipidus

Parathyroid

- Primary Hyperparathyroidism
- Secondary Hyperparathyroidism
- Tertiary Hyperparathyroidism
- Pseudohyperparathyroidism

Thyroid

- Hypothyroidism
- Hyperthyroidism
- Grave's Disease
- Autoimmune Hypothyroidism
- Multinodular Goitre
- Transient Thyroiditis
- Thyrotoxic Crisis
- Hashimoto's Thyroiditis

Adrenals

- Pheochromocytoma
- Congenital Adrenal Hyperplasia
- Cushing's Disease
- Addison's Disease

- Conn's Syndrome

GI Tract

- Insulinoma
- Gastrinoma
- Type 1 Diabetes Mellitus
- Type 2 Diabetes Mellitus
- Pancreatic Carcinoma
- Neuroendocrine Tumours
- Carcinoid Tumours

Reproductive

- PCOS (Polycystic Ovarian Syndrome)
- Leydig Cell Tumour
- Teratoma
- Granulosa Cell Tumour
- Menopause
- Hypogonadism
- Turner's Syndrome (45XO)
- Klinefelter's Syndrome (47XXY)
- 5 alpha reductase deficiency (guevedoce)

Investigations

- Blood Glucose (BM)
- Calcium
- CT
- Dexamethasone Suppression Test
- FNA Cytology
- Gonadotropins
- MRI
- PET
- Radionuclide
- Serum Cortisol
- Sinus ACTH Sampling
- Specific Hormone Testing
- Thyroxine
- TSH

Ultrasound

Urinalysis