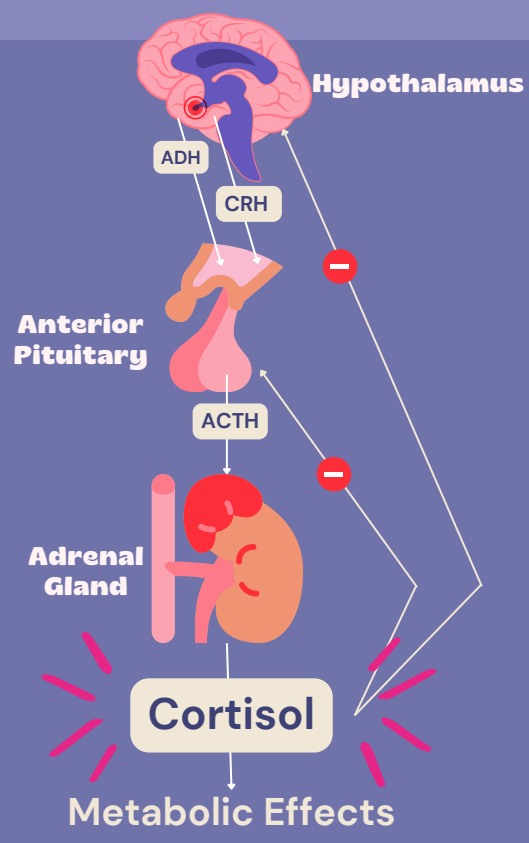
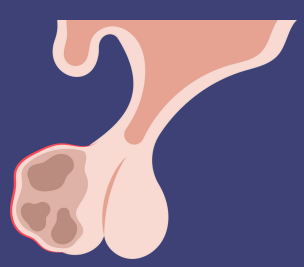
A closer look at Cushing's syndrome

A CLOSER LOOK AT:
CUSHING'S SYNDROME



Results from the **overproduction of cortisol**, produced by the adrenal glands due to:

ACTH Producing Pituitary Adenoma



ACTH -dependent
aka **Cushing's Disease**

ACTH dependent Cushing can also be result of Ectopic ACTH production from a **neuroendocrine tumor** elsewhere

Cortisol Producing Adrenal adenoma

ACTH -independent

Corticostreoid Medication

Exogenous

Due to prolonged use (most common cause)

3 Step Approach to Diagnostic Testing

Step 1: Conduct at least 2

24-hour urine free cortisol (UFC) (Best)
and/or
Late-night salivary cortisol (Best)
and/or
Overnight 1 mg Dexamethasone Suppression Test
Cortisol higher than 1.8mcg/dl is abnormal

Step 2:

Serum ACTH levels
in order to determine ACTH dependent or independent

Step 3:

If a diagnosis of ACTH-dependent:
Inferior Petrosal Sinus Sampling
in order to determine where ACTH is produced, pituitary or neuroendocrine tumor elsewhere

If diagnosis is ACTH-independent:
Abdominal Imaging
to look for adrenal adenoma or carcinoma

Clinical manifestations

Central weight gain
Hyperpigmentation
Muscle weakness
Menstrual irregularities
Hyperglycemia
Osteoporosis

Treatment Options

Surgery
to remove pituitary, adrenal or neuroendcrine tumor

Radiation
if the tumor cannot be surgically removed or if it regrows after surgery

Medications
To control cortisol levels:
ketoconazole, metyrapone, mitotane
To control ACTH levels:
pasireotide, cabergoline

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