

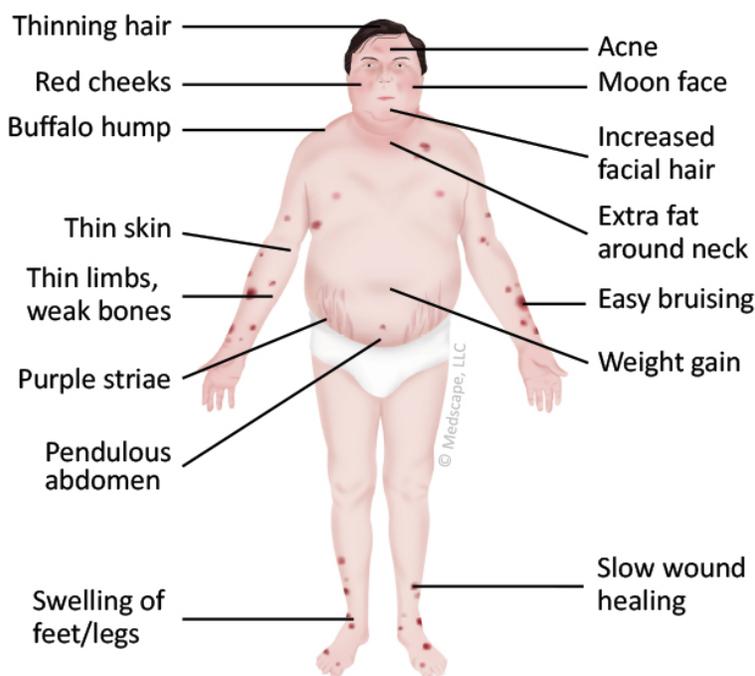
Cushing Disease: Are You Missing It in Your Patients?

BACK TO BASICS

- Cushing disease is a condition that occurs when a tumor arises in the corticotropic cells of the pituitary gland
- The tumor begins to secrete the hormone ACTH, which triggers the adrenal glands to produce cortisol (the body's stress hormones)
- Cortisol affects metabolism and normally helps the body recover from stress caused by surgery, an injury, or an infection. However, when the body produces too much cortisol from this tumor, it leads to a variety of symptoms
- People of all ages can be affected but female individuals in their 30s and 40s are the most at risk of being diagnosed with the condition
- Most ACTH-secreting tumors are not cancerous but, in rare cases, they can change and become cancerous

WHAT SHOULD I BE LOOKING FOR IN MY PATIENTS?

Change in appearance:	Muscle and bone symptoms:	Additional symptoms to be on the lookout for:
<ul style="list-style-type: none"> • Hump on back of neck ("buffalo hump") • Round, red face • Striae (purple stretch marks, especially on the chest, armpits, and belly) • Facial acne • Hirsutism; acanthosis nigricans (AN) • Fungal infections • Hyperpigmentation • Easy bruising • Upper body obesity; thin arms and legs, with rapid weight gain 	<ul style="list-style-type: none"> • Backache • Bone pain or tenderness • Weakening of the bones; rib and spinal fractures • Weak muscles and exercise intolerance 	<ul style="list-style-type: none"> • Decreased or no desire for sex (low libido) • Erection problems • Irregular menses • Diabetes • Headaches • Hypertension



- Hypertension
- Poor short-term memory
- Irritability
- Poor concentration
- Menstrual irregularity
- Glucose intolerance
- Headaches
- Recurrent infection
- Depression

THE CHALLENGE OF DIAGNOSIS

Tests help to determine if excess levels of cortisol are present and, if so, from what source.

- 24-hour urinary free cortisol level
- Late-night salivary cortisol level
- 1 mg overnight dexamethasone suppression test
- The dexamethasone suppression test can produce false-positive and false-negative results, depending on the patient's medications. Look into their medication list and have them stop those medications 1 week prior to test
- Dexamethasone-suppressed corticotropin-releasing hormone (Dex-CRH) test
- Blood ACTH level
- Brain magnetic resonance imaging
- Inferior petrosal sinus sampling (IPSS)

Other tests that may be done include any of the following:

- Fasting blood glucose and A1C to test for diabetes
- Lipid and cholesterol testing
- Bone mineral density scan to check for osteoporosis

TREATMENT AND RECOVERY

- Treatment generally involves surgery to remove the pituitary tumor
- Radiation treatment of the pituitary gland may also be an option if the tumor is not completely removed
- Post-operatively, the pituitary gland may slowly start to work again and return to normal function
- The patient may need post-operative cortisol replacement treatments, as the pituitary needs time to begin making ACTH again