

## Cushing's Syndrome Assessment

Cushing's syndrome is a condition caused by excessive amounts of the hormone cortisol being produced in the body. Cortisol is a hormone that helps maintain blood glucose levels, protect the body from stress, and suppress inflammation. This hormone is produced by the adrenal glands, which are located on top of the kidneys. The release of the hormone adrenocorticotropic hormone (ACTH) from the pituitary glands located in the brain signal the body to produce cortisol as part of the endocrine system.



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### Assessment

#### Increased Cortisol Levels

[Up-arrow Court-of-Sol](#)

In Cushing's syndrome, the adrenal glands are signaled to keep making cortisol, thereby increasing normal levels. Manifestations of this condition are related to the increased cortisol levels in the body. This includes obvious changes in physical appearance.

#### Truncal Obesity

[Trunk Fat](#)

Weight gain is the most common symptom in Cushing's syndrome, particularly in the chest and stomach (truncal obesity). It occurs because cortisol causes fat to be redistributed to these areas, leaving patients with a large middle section, but thin arms and legs.

#### Purple Abdominal Striae

[Purple Abdominal Stripes](#)

Purple marks called striae (stretch marks) often appear on the abdomen due to rapid weight gain, as well as decreased amounts of collagen available.

#### Buffalo Hump

[Buffalo Hump](#)

Fat deposits on the back of the neck and shoulders occurs and is known as a buffalo hump.

#### Decreased Bone Density

[Down-arrow Bone](#)

Excessive amounts of cortisol can lead to decreased bone density causing osteoporosis and back pain. Additionally, muscle wasting may occur, causing weakness, especially in the extremities.

#### Moon Face

[Moon Face](#)

Fat redistribution due to the cortisol effects often lead to a red, puffy, and rounded face; otherwise known as "moon face."

### **Thinning Skin**

#### **Thin Skin-suit**

Excessive amounts of cortisol lead to deficits in collagen level, which subsequently cause thinning of the skin. This makes the skin more easily prone to bruising. Additionally, catabolic processes slow wound healing.

### **Hyperglycemia**

#### **Hiker-Glue-bottle**

Hyperglycemia occurs due to the excessive levels of cortisol, which raise blood glucose levels in response to cortisol-induced insulin resistance and glucose intolerance, as well as increased gluconeogenesis by the liver.

### **Hypertension**

#### **Hiker-BP**

Sustained elevated blood pressure is often seen in patients with this disease due to sodium and water retention. This leads to hypervolemia and edema formation, thereby causing hypertension.

## **Considerations**

### **Long Term Glucocorticoid Use**

#### **Glue-quarter-on-steroids**

The most common cause of Cushing's syndrome is the long-term use of corticosteroids, particularly glucocorticoids. Examples include prednisone, dexamethasone, and prednisolone. They are often used to treat conditions, such as asthma, rheumatoid arthritis, or cancer.

### **Immunosuppression**

#### **Moon-suppressed**

It is important to be aware that patients with Cushing's syndrome/disease are often immunosuppressed. This places them at increased risk for infection related to their lowered resistance to stress and suppression of the immune system.