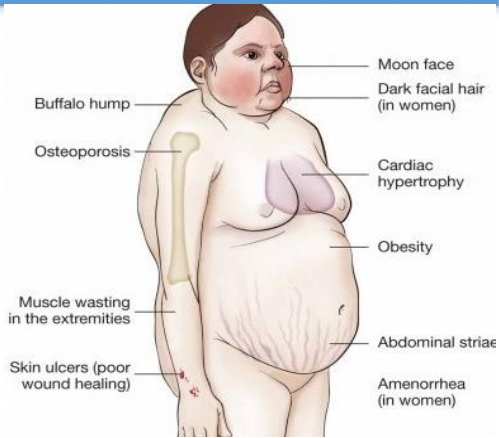


# Cushing's Disease

## Moon Face & Buffalo Hump



### Pathophysiology:

Cushing syndrome is caused from excessive adrenocortical activity, unlike Addison's disease where there is an under-production of corticosteroids.

### Etiology:

Cushing's may be caused by several factors including:

- A tumor of the pituitary gland that produces ACTH and stimulates the adrenal cortex to increase hormone production.
- The ectopic production of ACTH by malignancies (bronchogenic carcinoma is the most common)

### Treatment:

#### Medical:

If caused by a tumor, surgical removal is recommended. Adrenalectomy (removal of the adrenal gland) is recommended for unilateral adrenal hypertrophy.

#### Pharmacologic:

Adrenal enzyme inhibitors (metyrapone, aminoglutethimide, mitotane, ketoconazole) may be used to reduce hyperadrenalism if the syndrome is caused by ectopic ACTH secretion by a tumor that cannot be eradicated.

If Cushing's is caused from the admin of corticosteroid therapy, a reduction may be made and an eventual taper off to treat other disease.

### Labs and Diagnostics:

- **Serum cortisol** (normally higher in the AM and lower in the PM)
- **Urinary cortisol** (acquired by 24 hr collection (Cushings is assumed when the levels are 3 times the normal limit)
- **Low-dose dexamethasone (Decadron) suppression Test** (these are used to diagnose pituitary and adrenal causes of Cushing syndrome)

### Signs & Symptoms:

The primary S/S are mostly the result of increased glucocorticoids and androgens.

- "buffalo hump" in the neck
- Heavy trunk with thin arms and legs
- Easily bruising skin, with slow healing wounds
- Kyphosis with backache
- "moon face" appearance
- Weight gain

### Risk Factors:

While none of the below factors are direct causes, they are more prevent if you fall into each category.

- Women between 20-40
- Obesity
- Type 2 Diabetes
- Poorly controlled blood sugar levels
- High blood pressure

### Nursing Interventions:

**Assessment:** Health and History with the focus on the S/S of high concentrations of adrenal cortex hormones. Get patient's level of activity, and ability to carry out self care. Also, check the patient's mental status (depression), mood etc.

**The nurse is responsible for decreasing risk of injury** (impaired healing ability), risk of infection.

**The nurse assists in preparing the patient for surgery** if a tumor or adrenal gland is to be removed.

**Monitor blood glucose** before, during, and after surgery as diabetes is common in patients with Cushing syndrome.

**Encourage rest but at the same time you must encourage activity** to avoid complications of immobility (skin breakdown) as well as after surgery to prevent blood clots.

**Addisonian Crisis:** Withdrawal of corticosteroids by adrenalectomy, or by pituitary tumor removal are at risk for adrenal hypofunction and should be monitored as such.