

Harmonal Imbalance Caused Due to Addison's Disease

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DESCRIPTION

Addison's disease, also known as adrenal insufficiency, it is a rare disorder that occurs when the body doesn't secrete enough amount of hormones. In Addison's disease, the adrenal glands that are located just above the kidneys secrete a small amount of cortisol and aldosterone. Addison's disease is commonly observed in all age groups, and sometimes it can be life-threatening. Treatment involves taking hormones to replace those that are absent. Adrenal insufficiency is classified into primary, secondary, or tertiary:

- Primary adrenal insufficiency this is also known as Addison's disease. It arises when the adrenal glands are injured. They don't produce the required amounts of the hormones aldosterone and cortisol. This condition is rare. It may occur in children and adults.
- Secondary adrenal insufficiency this arises when the pituitary gland doesn't produce required amounts of the hormone ACTH (adrenocorticotropic). As a result, the adrenal glands don't secrete cortisol.
- Tertiary adrenal insufficiency this arises when the hypothalamus doesn't produce the required corticotrophin-releasing hormone. As a result, the pituitary gland doesn't secrete enough ACTH. As a result, the adrenal glands don't produce enough cortisol.

Primary adrenal insufficiency is most frequently caused when the immune system attacks healthy adrenal glands. Other causes may include: fungal infections, cancer, inherited disorders of the endocrine glands, tuberculosis infection of the adrenal glands, etc. A deficiency of the hormone ACTH leads to secondary adrenal insufficiency. It may occur when a person takes certain steroids for a long time because of a health problem. For example, people with rheumatoid arthritis or asthma should take prednisone. Other causes include: Loss of blood flow to the pituitary, Removal of parts of the hypothalamus, Pituitary gland tumors, Removal of the pituitary gland or radiation treatment of the pituitary gland.

Symptoms of Addison's disease generally develop slowly over several months. Frequently, the disease grows so slowly that

symptoms are unnoticed until a stress, such as an injury or illness, occurs and makes symptoms adverse. Symptoms and signs may include:

- Weight loss and decreased appetite
- Extreme fatigue
- Salt craving
- Nausea, diarrhea, or vomiting (gastrointestinal symptoms)
- Muscle or joint pains
- Irritability
- Darkening of skin (hyperpigmentation)
- Low blood pressure, even fainting
- Abdominal pain
- Depression or other behavioral symptoms
- Low blood sugar (hypoglycemia)
- Body hair loss or sexual dysfunction in women

Treatment

When suitable, surgery is used to remove tumors in the adrenal gland. Slightly invasive surgery is performed through the nostrils to remove tumors that are present in the pituitary gland. Taking medication to stop the excessive production of hormones Hormone replacement like hydrocortisone (Cortef), methylprednisolone, or prednisone is used to replace cortisol. These hormones are given at a particular time to mimic the normal 24 hour fluctuation of cortisol levels. Fludrocortisone acetate is used to replace aldosterone.

Diagnosis

The tests used to diagnose Addison disease are

Blood, urine, or saliva tests: These tests are used to check levels of the ACTH and adrenal hormones. They can also notice the changes in the sodium and potassium levels in your blood.

Tuberculosis tests: This test is used to look for the germ that causes tuberculosis.

Imaging test: These include ultrasound, CT scan, X-rays, and MRI.

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