

Types and Symptoms of Adrenal Gland Disorders

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DESCRIPTION

The adrenal glands are small, triangular-shaped glands that reside on top of each kidney and are made up of two parts: the cortex and the medulla. The adrenal cortex is the major component of each adrenal gland and is divided into three distinct parts that produce different, important hormones. The cortex also plays a crucial part in the function of the adrenal glands by producing stress hormones. A protective adipose capsule surrounds the entire gland. The glands fit snugly around the top of each kidney. While the adrenal glands are well known for producing adrenaline, a hormone that is released in stressful conditions, causing the "fight or flight" reflex, they also generate corticosteroid hormones. Glucocorticoids and mineralocorticoids are hormones that regulate immune system responses, fight inflammation, monitor cardiac functions, and convert lipids, proteins, and carbohydrates into energy. The principal mineralocorticoid hormone, aldosterone, balance salt and water in the bloodstream, regulating blood pressure. Without aldosterone, the kidneys lose too much sodium and water, resulting in a reduction in blood pressure or potentially fatal dehydration. The adrenal glands also produce androgen and estrogen, which are sex hormones. The adrenal glands in males ensure that sex organs mature correctly during childhood development. The production of sex hormones in females is responsible for body hair development during puberty.

Types of adrenal gland disorders

Adrenal gland disorders range in their cause and treatment, but they can severely impair an individual's ability to thrive, both mentally and physically.

Addison's disease: It is an adrenal insufficiency disorder characterized by under producing adrenal glands and is frequently triggered by an autoimmune disorder such as HIV, Lupus, or type I diabetes. Failure to produce enough amounts of hormones, such as cortisol and aldosterone, can cause exhaustion, nausea, and muscle weakness, eventually leading to an addisonian crisis or adrenal crisis - a potentially fatal situation that needs prompt treatment and hospitalization.

Cushing's syndrome: Cushing's disease, unlike Addison's, is caused by an overproduction of hormones inside the adrenal glands. They release an excessive amount of cortisol into the bloodstream, resulting in obesity, high blood pressure, excessive facial hair, irregular menstruation periods, and bruises. These symptoms can severely impair one's quality of life and necessitate professional evaluation, monitoring, and treatment.

Adrenal incidentaloma: The tumors found on the adrenal gland may produce more hormones and cause havoc in the body. They are frequently removed surgically.

Pheochromocytomas: Patients with this adrenal condition have tumors that form in the medulla, causing an excess of epinephrine and norepinephrine. High blood pressure is caused by an excess of these hormones, which can lead to heart attacks or strokes.

Pituitary tumors: The pituitary gland, located at the base of the brain, is also in charge of releasing hormones into our bodies. Certain hormones, such as adrenocorticotropic hormone, cause the adrenal glands to release cortisol into the bloodstream. A breakdown in communication between the pituitary and adrenal glands caused by benign or malignant tumors can put the entire system out of whack.

Adrenal gland suppression: Steroid use frequently causes adrenal gland suppression. Because drugs imitate cortisol, the adrenal glands can be instructed to produce less cortisol. When steroid medication is abruptly discontinued, the adrenal glands may not get the signal to resume cortisol production. A hormonal imbalance can persist for weeks or even months until the adrenal glands rebalance.

Symptoms of adrenal disorders

Adrenal disorders can occur in a variety of ways. Symptoms vary based on the individual and preexisting diseases; however, they frequently include the following: Weight loss, muscle weakness, fatigue, skin darkening, headaches, nausea, vomiting, diarrhea, a craving for salty foods, mouth sores, abdominal pain, and constipation are all symptoms.

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Adrenal disorders have a variety of risk factors, and the majority of cases are caused by autoimmune disorders. Other determining elements could be: Chronic diseases, such as tuberculosis, Infections in the past, Surgery to remove sections

of the adrenal glands, Graves' disease, Lupus, and HIV are examples of autoimmune disorders and some antifungal medicines.