

The endocrine system: diseases and age-related changes



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Cushing Syndrome is a condition that presents itself due to the endocrine system. The endocrine system is responsible for secretion of hormones. Cushing syndrome comes about when the body has excess levels of a hormone called cortisol in the body. Cortisol is very important. It plays a role in managing blood pressure and keeps the cardiovascular system functioning normally. Cortisol also aids the body in digesting fats and carbohydrates found in a person's diet and converts those to energy that the body can use.

Cushing syndrome very rarely can be inherited. A person may inherit a high risk of getting tumors in their endocrine glands, which would affect cortisol levels of the body, thus resulting in Cushing Syndrome. This syndrome can also be developed by taking a high dose of corticosteroids for an extended period of time. These types of medications have the same effect on the body as a natural cortisol would.

Symptoms of Cushing Syndrome vary from one patient to another. The most tell-tale sign of this syndrome is known as a buffalo hump between the shoulders. Weight gain and fatty tissues form and grow over time. A person may have purple looking stretch marks and thinning skin that can bruise easily. Cuts will heal slowly and a person will see acne. Women may experience thicker or visible facial hair or an off-normal menstrual cycle. Men may experience decreased libido, infertility, and erectile dysfunction. Depression, fatigue, and muscle weakness are also another symptom.

When treating Cushing Syndrome, doctors will try to lower the high levels of cortisol in the body. They may reduce corticosteroid use or if your syndrome is caused by a tumor, then surgery may be necessary. If the surgeon cannot

remove the entire tumor, radiation may be necessary. Medications are also another treatment option.

Cretinism Cretinism can also be known as congenital hypothyroidism. This happening is a thyroid issue that prevents growth in young children. This thyroid issue can be sporadic, genetic, or endemic. A child is born with this medical condition and symptoms can be noticed as early as the first year. If this condition goes untreated, the aging human will have mild to severe impairment of physical and mental growth. Normally this medical condition results from an abnormal development of the thyroid gland.

The first sign of cretinism is poor length growth. This can be seen in children beginning around the age of one. In adults, you may see mental deterioration, swollen skin, and the loss of hair and water. Bone maturation is severely delayed and the person will most likely become infertile. A person may also have thickened skin, an enlarged tongue, or an abdomen that sticks out. Brain impairment could prevent the person from standing or walking. A person may become non-verbal or dependent on other people for basic care needs.

Cretinism is brought on by an iodine deficiency. Iodine is the marking element needed for the synthesis of thyroid hormones. This iodine deficiency is the most preventative brain deficiency. Cretinism would be most common in a country with no outside food sources because they are most at risk for iodine deficiency diseases.

Patients with this disease can go untreated and experience severe retardation for a lifetime. They however, can also be helped to grow by an

artificial thyroid hormonal medication. Thyroxine is prescribed as the treatment to this disease and the patient would remain on this medication their whole life. If taken correctly, the patient would grow very near a normal range, if not completely normal. The earlier cretinism is caught, the better because brain damage is not irreversible.