Addison's Disease Assessment

This condition is due to hypofunction of the adrenal gland which may be caused by primary adrenocortical insufficiency or lack of pituitary adrenocorticotropic hormone (ACTH) secretion. Symptoms may occur gradually or rapidly with the onset of stress (surgery, trauma, severe infection).

PLAY PICMONIC

Assessment

Deficiency of Cortisol and Aldosterone

Deficient Court-of-Sol judge and Aldo-stereo

This disease is characterized by a lack of cortisol and aldosterone from the cortex of the adrenal gland.

Irritability

Irritated

Hyponatremia often causes confusion and irritability as neurons in the brain are unable to fire adequately.

Hyperkalemia

Hiker-banana

Aldosterone usually retains sodium and excretes potassium. Lack of aldosterone may lead to an increase in potassium. With potassium retention, there is an increase in hydrogen ion reabsorption that can lead to acidosis.

Muscle Weakness

Weak and drooping muscle

Low sodium and increased potassium may cause muscle weakness and cramps. Patients often experience chronic fatigue.

Skin Hyperpigmentation

Hiker-pig with Hyperpigmentation

Darkening of the skin is seen first in the buccal mucosa but early presentations may also be seen on the elbows and knees. This is seen only in primary adrenocortical insufficiency, increased ACTH causes the skin to darken due to overstimulation of melanocytes.

Hyponatremia

Hippo-salt

Deficiency of aldosterone leads to an inability to reabsorb sodium in the kidney.

Hypotension

Hippo-BP

Sodium is required to maintain blood pressure and fluid volume. Excessive loss of sodium in the body leads to hypovolemia causing low blood pressure.

Hypoglycemia

Hippo-glue-bottle

Lack of cortisol causes a decreased synthesis of glucose especially during fasting states, which leads to low blood glucose levels.

Considerations

Addisonian Crisis

Add-sun with Crying-crisis

An Addisonian crisis or acute adrenal insufficiency is an exacerbation of a lack of aldosterone and cortisol. It may result because of increased demand such as infection or trauma or the abrupt withdrawal of exogenous glucocorticoid use. It is a life-threatening event that can lead to shock caused by low serum sodium and severe hypotension due to blood volume depletion from the loss of aldosterone.