PAW HEALTH NETWORK INC.

HYPOADRENOCORTICISM

ABOUT THE DISEASE

The adrenal glands secrete hormones that are responsible for helping the body respond to stress (glucocorticoids, cortisol) and regulate blood electrolytes (mineralocorticoids, aldosterone).

Hypoadrenocorticism (Addison's Disease) results from the under secretion of adrenal hormones which causes an inability to respond to normal daily stressors and develop significant blood electrolyte imbalances.

In most circumstances, patients have very vague clinical signs, which may include lethargy, diarrhea, vomiting, increased thirst, increased urination, and weight loss.

In rare, severe cases, patients will be in full cardiovascular collapse, which may lead to weakness, loss of consciousness, seizures, and even death. This is also known as Addisonian crisis.

Addison's disease has two types:

- Primary Addison's Disease – occurs from a dysfunction or autoimmune destruction of the adrenal glands.
- Secondary Addison's Disease – occurs secondary to another cause, such as abrupt withdrawal of oral steroids.

Addison's disease is also classified as:

- Typical Addison's Disease – dysfunction of both glucocorticoid and mineralocorticoid secretion.
    - Patients usually have significant electrolyte abnormalities.
- Atypical Addison's Disease – dysfunction of only glucocorticoid secretion.
    - Patients typically have normal electrolytes.

OBTAINING A DIAGNOSIS

When a patient is in an Addisonian crisis, testing electrolytes and a baseline cortisol will typically yield the diagnosis.

In other cases, the only definitive test for **Addison's disease** is an ACTH stimulation test. With this test, a patient is given an injection of a hormone called ACTH that forces the adrenal glands to secrete adrenal hormones. If there is little to no response, patients are diagnosed with the disease. Although, if a patient is being treated with oral steroids (prednisone/prednisolone), the test may be falsely altered.

TREATMENT

Addison's disease patients are placed onto low-dose oral steroids (glucocorticoid therapy) in the form of prednisone or prednisolone. During known stressful events, patients often have doses increased to prevent Addisonian crisis.

To address the electrolyte imbalance, most patients will receive an injection of DOCP (Percorten-V or Zycortal) every 25 days (mineralocorticoid therapy). Doses for steroids and DOCP are variable and must be individualized based upon each patient's response to therapy.

Once treatment is started, electrolytes are checked 14 days after each injection to determine each patient's regulation. Through the first few weeks, patients will need to be monitored for depression, weakness, lethargy, vomiting, or diarrhea.

TIPS FOR SUCCESS

- Consistent treatment and follow up is vital to the health of the patient.
- Many patients require an increase in oral steroid dose during times of stress or strain.
- Occasionally patients may have an increase in thirst and urination from excess steroids or DOCP.
    - Typical solution is to decrease steroid dose or increase time between DOCP injections.
- Seek immediate evaluation should the patient become weak, collapses, or loses consciousness as they may be entering into Addisonian crisis.