

ADRENAL INSUFFICIENCY MANAGEMENT

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Adrenal insufficiency is a condition in which the adrenal cortex cannot respond with adequate production of cortisol, the main hormone regulating our response to stress. In some cases there is also a lack of aldosterone, a hormone responsible for regulating sodium balance. Patients with adrenal insufficiency must be managed by a competent endocrinologist. Maintenance treatment consists of oral medication, usually hydrocortisone or prednisone sometimes in combination with fludrocortisone and extra salt (sodium chloride). It is very important not to miss medication doses, as this may result in adrenal crisis or death. It is important to know that during episodes of stress such as high fever, critical illness, surgery, or trauma, the patient will require increased steroid medication doses and intravenous saline fluids to prevent an adrenal crisis. Adrenal crisis may occur if the patient is not diagnosed and treated properly. Manifestations of such crises include low blood pressure, shock, dehydration, or loss of consciousness and death.

Emergency management of adrenal insufficiency:

For fever $>101^{\circ}\text{F}$, administer up to three times the usual maintenance dose of hydrocortisone (for small children this would typically be about 5 mg three times daily, or for adults 10 to 20 mg three times daily), supply ample electrolyte containing fluids (such as sports drinks), and call your physician. This higher dose of medication should only be given for up to 3 days, then resume usual doses once illness resolves.

- If a patient cannot tolerate oral medications, try giving a 25 mg rectal hydrocortisone suppository every 6 hours with small sips of fluids.
- If a patient has diarrhea, administer instead an intramuscular injection of Solu-Cortef (hydrocortisone, give 25 mg for infant or small child, and 50-100 mg for older children & adults). IF SOMEONE APPEARS LETHARGIC OR UNAROUSABLE GIVE THE INJECTION OF SOLU-CORTEF AND GET EMERGENCY HELP.

If the patient requires a home injection of Solu-Cortef, it is prudent to come to an urgent or emergency medical facility, since at this point, IV saline fluids and medication are often required. Blood pressure, pulse, weight, serum electrolytes and glucose should be measured.

The treating endocrinologist should provide standing prescriptions and instructions for injectable and rectal hydrocortisone. Not all emergency response units carry injectable hydrocortisone. If you don't have these medications, ask your doctor. This may save a life. Carry these when you travel.

You may view a Solu-cortef injection video at the CARES Foundation website:
<http://www.caresfoundation.org/dosing/illness-and-emergency/>