

Addison's Disease

Information
Packet

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What Is Addison's Disease?

Addison's disease is a rare endocrine Autoimmune condition where the adrenal glands cease to function, meaning your body no longer produces enough of certain essential hormones, known as steroid hormones.

The adrenal glands are small triangular-shaped glands that sit on top of your kidneys. Their job is to produce the hormones that keep the body functioning properly. Adrenal glands produce hormones that help regulate your metabolism, immune system, blood pressure, response to stress and other essential functions.

Addison's disease affects approximately 1 in 10,000 people, meaning an estimated 300 - 350 new cases are diagnosed each year across the UK. This makes it roughly 300 times rarer than diabetes, another endocrine condition that sometimes occurs alongside Addison's. Diagnosis is most common between the ages of 30 – 50, but can occur at any age.



What Are The Signs And Symptoms Of Addisons Disease And Adrenal Insufficiency

People with adrenal failure typically report some or all the following symptoms:

- Overwhelming exhaustion
- Weakness
- Weight loss
- Deepening skin pigmentation (looking like they have a suntan even when they haven't been out in the sun)
- Dizziness on standing
- Low blood pressure
- Poor appetite
- Nausea or vomiting
- Difficulty concentrating
- Muscle weakness with cramps
- Salt cravings
- Headaches
- Stomach pains



Adrenal Crisis

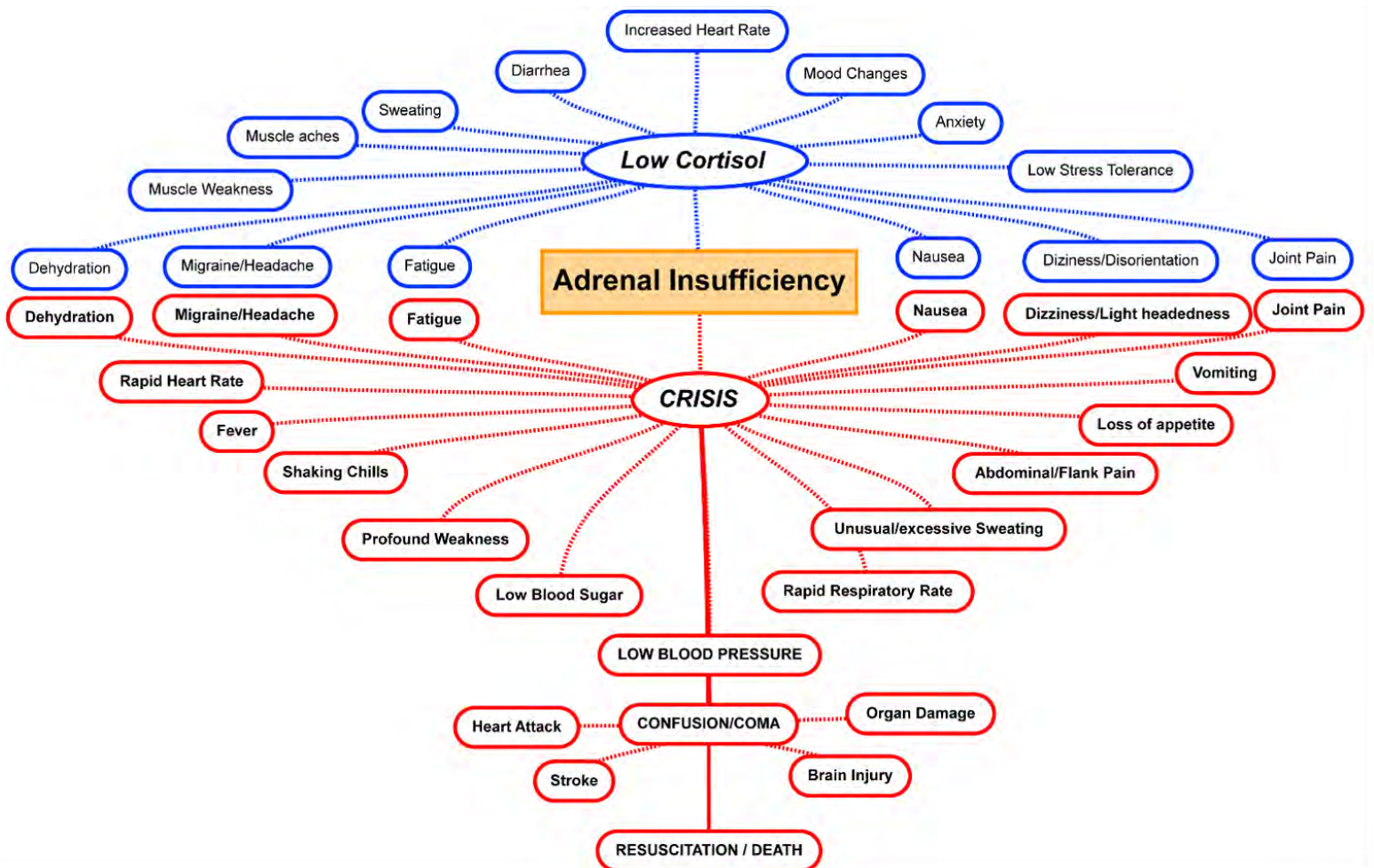
Around 8% of people with Addison's Disease experience an adrenal crisis each year; some people more frequently than others. It's vitally important to learn the signs of an impending crisis and what to do in this medical emergency.

An adrenal crisis occurs in people with Addison's when the cortisol present in their body is not sufficient to keep it functioning. Common triggers include vomiting, diarrhoea, other infections (eg flu) or extreme emotional stress. An adrenal crisis is a **life-threatening** situation and requires immediate medical treatment with an emergency injection of hydrocortisone.

Although adrenal insufficiency usually develops over time, it can also appear suddenly as an acute adrenal failure (adrenal crisis). It has similar symptoms, but the consequences are more serious, including life-threatening shock, seizures, and coma. These may develop if the condition is left untreated.

Adrenal Crisis Diagram

Below is a pictorial diagram showing the common symptoms to recognise and the difference between Low Cortisol, and when you are in or heading towards a Crisis.





What is cortisol?

Cortisol is a glucocorticoid hormone that plays several important roles in the body. It helps control the body's use of fats, proteins and carbohydrates; suppresses inflammation; regulates blood pressure; increases blood sugar; and can also decrease bone formation.

This hormone also controls the sleep/wake cycle. It is released during times of stress to help your body get an energy boost and better handle an emergency situation. Fight or flight response.



Aldosterone

This mineralocorticoid hormone plays a central role in regulating blood pressure and certain electrolytes (sodium and potassium). Aldosterone sends signals to the kidneys, resulting in the kidneys absorbing more sodium into the bloodstream and releasing potassium. This means that aldosterone also helps regulate the blood pH by controlling the levels of electrolytes in the blood.

When this is Low, or when in a crisis, people with Addison's Disease often experience a craving for salt, this is their body's way of telling us to take more, often through a high electrolyte balanced drink, or simply just taking pure rock salt crystals mixed into a small drink of water or on a spoon.

When symptoms of low Aldosterone occur, this is a clear sign of the person heading towards a crisis, as such simply being in hot weather can mean a higher intake needed due to sweating and perspiration.



How to manage Addison's disease

Having Addison's Disease can be difficult, especially to come to terms with both physically and mentally, however once you get to know your body better and understand how it reacts to different situations, and recognising the symptoms, managing the disease becomes easier.

People with Addison's Disease need to take Hydrocortisol tablets on a daily basis, to replace the lack of hormones that would normally be produced, there is no set rule for the amount needed, and this can vary by person to person based on their weight, height, job and how quickly they absorb the medication. It usually lasts for up to 6 hours maximum in your body, so most people take 3 doses a day.

However, this can change if you become unwell and may need to updose/stress dose, which means doubling the number of your normal tablets to cope or adding in an extra dose during the day.

Should people with Addison's Disease feel like they are heading for a crisis or in a crisis situation, then they are given an emergency injection to take, the idea is that the emergency dose is of such a high dosage to cover and hopefully pull out of or prevent a full crisis, however at this point, they will always need emergency medical care, taken to hospital and monitored for at least 24 hours, whilst having IV fluids, IV Hydrocortisol at 200ml per day as a minimum, and Antibiotics to treat any infection that may be causing the crisis or for any medical procedure.



How to manage Addison's disease continued

If you know of or come across someone who suffers with Addison's Disease, it may be useful for you to know what to do in an emergency situation.

If you know the person, you may be trained or aware of the need to administer the emergency ampule of Hydrocortisone.

However regardless, if you or someone you know suspects that someone is having an **adrenal crisis** or **Addison's crisis**, it is of the highest priority that they get emergency treatment, this usually falls within a category 1 medical emergency, and 999 call handlers will recognise the severity of the situation if you are able to let them know that you or someone who suffers with Addison's Disease is having an adrenal crisis, particularly if they are not able to absorb their normal medication, due to continually being sick (2 or more time in an hour is enough), or diarrhoea (2-3 times or more in an hour), or due to a serious illness/infection, or other reason such as an injury or car crash, or if they are starting to fall in and out of consciousness.

Without the necessary replacement of the hormones, the body can not cope sufficiently and will start to shut off leading to a coma or death.



Useful links for more information on Addison's disease

Pituitary Foundation

Addison's Disease

Reference list

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