A GUIDE TO ADRENAL CRISIS AND SICK DAY MANAGEMENT



ADRENAL CRISIS AND SICK DAY MANAGEMENT

WHAT IS AN ADRENAL CRISIS?

An adrenal crisis is an acute medical condition characterised by a range of features caused by insufficient cortisol levels in the body during times of increased cortisol needs. These features include dehydration, extremely low blood pressure, nausea and vomiting. The body needs more cortisol during:

- times of severe illnesses (such as fevers, bacterial or viral infections)
- trauma or medical operations.

An adrenal crisis can occur in somebody with a new diagnosis of cortisol deficiency or people who require long term cortisol replacement.

An adrenal crisis may become life-threatening, if it's not recognised and treated appropriately with higher doses of cortisone.

WHAT IS ADRENAL INSUFFICIENCY?

Adrenal insufficiency (also known as cortisol deficiency) is the medical term used when a person doesn't produce enough cortisol from their adrenal glands and needs long-term replacement of cortisone.

There are several reasons why people can have adrenal insufficiency. Problems with the adrenal glands themselves can directly reduce cortisol production.

For example:

- Addison's' disease —an autoimmune condition that damages the adrenal glands
- Surgical removal of the adrenal glands.

Adrenal insufficiency can also be caused by conditions that affect the pituitary gland or the hypothalamus. The pituitary gland produces a hormone called ACTH that tells your adrenal glands what to do. Problems with the pituitary gland or hypothalamus can affect ACTH production which means the adrenal glands won't make enough cortisol.

All people with cortisol insufficiency (of whichever cause) can be at risk of an adrenal crisis.

People can prevent an adrenal crisis by ensuring they know when to increase their cortisone replacement and by having a **"Sick Day Management Plan"**.

SIGNS OF AN ADRENAL CRISIS

Signs to look for include:

- headache
- nausea
- irritability and restlessness
- clumsiness
- fatigue
- muscle aches
- weakness

- feeling cold or shivery
- spasms
- dizziness, especially on standing
- abdominal pain, cramps or **diarrhoea**
- vomiting
- reduced or loss of consciousness
- seizures.

Repeated vomiting, diarrhoea, changes in consciousness and seizures are a medical emergency. Dial 000.

EMERGENCY PROTOCOL

If you suspect an adrenal crisis and vomiting, changes in consciousness and seizures are not evident, you should:

- Take emergency medication or injection immediately, as outlined on your Sick Day Management Plan by your Endocrinologist. This should be taken before medical help arrives, even if you are going to hospital.
- Seek immediate medical attention by calling an ambulance or visiting your nearest hospital emergency and inform medical staff of your pituitary condition

SICK DAY MANAGEMENT PLAN

If you have adrenal insufficiency, it's important to have a **Sick Day Management Plan**. This is a plan developed by your doctor which outlines what to do and how to adjust your medications if you're not well. Ensure you discuss the details of your plan at each follow up with your specialists. You should also share this plan with your other health professionals (such as you GP and if you have to go to hospital for any procedures).

It's recommended you have two copies of this plan — one for you and one for your partner or next of kin. It's also a good idea to take a photo of the plan and keep it on your phone.

Alert bracelet and steroid card

If you take steroid replacement therapy it's recommended you wear an alert bracelet or carry a steroid card for emergencies.

An **alert bracelet** usually contains information such as "give hydrocortisone" which will tell medical professionals what to do if you are too unwell to tell them yourself.

A **steroid card** fits easily inside a purse or wallet and contains details of your medical condition and medications you take, which can be helpful in emergencies.

PREVENTING AN ADRENAL CRISIS

An adrenal crisis can sound frightening but there are things you can do to reduce the risk.

Understand your condition

Make sure you understand how to recognise signs and symptoms that you're unwell and how to adjust medication doses during times of illness, including when to administer emergency medication.

Be prepared

Know your emergency plan and always have emergency medications available wherever you go.

Wear medical identification

Make it easy for those caring for you to help you in an emergency.

Advise other healthcare professionals

Make sure other healthcare professionals understand your condition, especially before any medical or dental procedures.

Educate others

Tell family, friends, teachers, and work colleagues about your condition, and what they should do if you become unwell.

Have regular checkups

Maintain regular appointments with your endocrinologist to adjust medication as needed, and to ensure emergency protocols are up to date.

MORE INFORMATION

The Australian Pituitary Foundation provides social support for patients and carers, and has published a range of patient resources on pituitary conditions and treatments.

For more information, please visit our website: www.pituitary.asn.au

Email: support@pituitary.asn.au

Phone: 1300 331 807

REFERENCES

- 1. Endocrine Society of Australia, Adrenal Insufficiency Resources, https://www.endocrinesociety.org.au/reseources-adrenal-insufficency-resources.asp
- 2. Hormones Australia, Adrenal Insufficiency, https://www.hormones-australia.org.au/endocrine-diseases/adrenal-insufficiency/#PrimaryAdrenalInsufficiencyAdr enalCrisis
- 3. The Pituitary Foundation, Adrenal Insufficiency, https://www.pituitary.org.uk/information/adrenal-insufficiency/
- 4. The Pituitary Foundation, Adrenal Crisis signs to look for, https://www.pituitary.org.uk/app/uploads/2023/04/Adrenal-Crisis-signs-table.pdf

Acknowledgement – We are grateful to the members of the Australian Pituitary Foundation for reviewing this information.

Disclaimer – The information in this guide, whether provided by the Australian Pituitary Foundation or a third party, is provided as a general guide and is not intended to replace professional health advice. Please consult your endocrinologist if you have any concern about your treatment or are experiencing side effects. The Australian Pituitary Foundation, nor a third party, does not accept liability for any injury, loss or damage incurred using or relying on the information in this production.

This fact sheet is proudly endorsed by:



Endocrine Nurses' Society of Australasia Inc.