Long term steroid hormone replacement therapy

Department of Endocrinology
‘Hydrocortisone sick day rules’

What are ‘sick day rules’?
’Sick day rules’ give you advice about how to manage your usual tablet treatment if you are ill for another reason (for example, if you have ‘flu’).

What is hydrocortisone?
Hydrocortisone is similar to cortisol, one of the body’s natural steroid hormones (chemical messengers). Cortisol is produced by the adrenal glands just above the kidneys) in response to instructions from the pituitary gland (at the base of the brain). It has many vital roles in maintaining normal healthy functioning, and is a very important part of the response to ‘stress’ of any kind, including illness.

How should I take my hydrocortisone?
The natural pattern of cortisol production results in high levels early in the morning, falling to very low levels in the evening and at night. Hydrocortisone replacement therapy is usually taken twice or three times a day. It can be taken on an empty stomach or with food. The largest dose is taken first thing in the morning, to mimic the natural rhythm as far a possible. You should not routinely take your hydrocortisone after 5pm, as this can disturb your sleep.

Can hydrocortisone have bad effects on me?
You are prescribed a low dose of hydrocortisone to replace what your body should make naturally. High doses of steroids taken for long periods of time can have side effects, but this is not the case with steroid hormone replacement therapy. It is not an ‘anabolic steroid’, of the type that is sometimes used I abused by athletes and body builders.

Do I need any other types of hormone replacement therapy?
If your adrenal gland is not working properly (Addison’s disease) you usually also need to take fludrocortisone, which helps to regulate your
salt and water balance. If your pituitary gland is not working properly, you may need a range of other types of hormone replacement therapy: your hospital specialist will assess this and advise you.

**What should I do if I am ill?**

Very minor illnesses can be ignored. This section refers to illnesses such as bad colds or flu, and other illnesses causing a fever (high temperature).

Never stop taking your hydrocortisone. If you are ill (you have a fever, or feel you need to take time off work or stay in bed) you should double you dose of hydrocortisone until you feel better. This should be continued for as long as you are ill, then you can quickly go back to your normal dose. Taking a higher dose of hydrocortisone for a short time while you are ill is necessary and is not harmful. This is how your body would respond if you were able to make cortisol naturally. You do not need to change the doses of any other hormone tablets you take regularly. For more severe illnesses, you may need to triple your dose for a while: you should also see your GP that same day.

**What about vomiting and diarrhoea?**

If you are vomiting and unable to take your hydrocortisone tablets, or if you have diarrhoea, you should seek urgent medical assistance, as you will need to be given hydrocortisone by injection.

It may be useful to have a vial of hydrocortisone than can be given by injection into the muscles for use in an emergency. Both you and a relative or close friend should be shown how to give it. Your hospital doctor or GP should be able to arrange this. If you do give yourself a hydrocortisone injection it is very important to seek medical advice immediately: you should be fully assessed and may need to be admitted to hospital until you recover.

**Travel abroad**

Check that you have an adequate supply of hydrocortisone before you go on holiday. It can also be useful to take some hydrocortisone for injection with you, especially if you are visiting remote areas: you will need a doctor’s letter explaining what it is for.
Other advice

• If you are having an operation or an invasive procedure such as an endoscopy, you should alert the doctors looking after you to the fact that you take hydrocortisone replacement therapy. There are online guidelines at www.addisonsdisease.org.uk/surgery
• Wear a silicone band or other Medical ID bracelet or necklace, which states ‘Adrenal Insufficiency (steroid dependent)’ and carry an NHS steroid emergency card (which your pharmacist can supply).
• If you are prescribed hydrocortisone for injection, keep an eye on the expiry date and renew it in good time. There is a video about how to give an emergency injection online at www.addisonsdisease.org.uk/emergency

Your GP, hospital doctor, endocrine specialist nurse or pharmacist will be able to answer other questions you may have.

Contacts:

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Patient self-help groups and further information:
The UK Addison’s Disease Self Help Group www.addisons.org.uk

The Pituitary Foundation www.pituitary.org.uk

This leaflet is intended for patients receiving care in Brighton & Hove or Haywards Heath

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