

# Steroid Replacement Treatment

Notes and instructions for patients taking:

**Hydrocortisone      Prednisolone      Dexamethasone**

The body's natural steroid hormones are essential to health and the normal healthy response to stress and illness.

The adrenal glands are found just above each kidney and normally produce a steroid hormone known as *cortisol*. Cortisol is present in the blood of all normal people, and is essential for a normal healthy life.

Cortisol levels vary considerably: During the day it is normally at its highest level first thing in the morning, and then falls through the day to very low levels during sleep. It also rises during severe illnesses, including accidents and operations, and this rise is essential to allow the body to cope with this type of "stress". Levels also rise in response to other sorts of physical and psychological stress.

People who fail to make enough steroid hormone generally feel weak and unwell, tend to have a low blood pressure, and may become dangerously ill when 'stressed' by another illness or accident. This is why you need replacement if you have a steroid deficiency.

**Since steroids are so important to your health, it is vital that you know about your condition, and about what to do if you become unwell.**

You are now taking steroid tablets, this will be for one of 3 reasons:

1. *Because your tests have shown that your body is unable to make enough of the normal steroid hormone cortisol.* In this case you will probably be taking **hydrocortisone** tablets, 3 times a day. Hydrocortisone is exactly the same substance as cortisol - so that this treatment is simply replacing the hormone that you are unable to make. The dose will depend on levels of the drug in your blood which we have measured throughout the day, to make sure that you always have the correct amount of hormone in your body.
2. *Because we wish to 'switch off' your adrenal glands, which are making other substances as well as cortisol.* In this case you will probably be taking **prednisolone** or **dexamethasone** tablets - often last thing at night and first thing in the morning.
3. *Because you need steroid treatment for another medical condition, unrelated to any hormonal problem.* This will suppress the activity of your adrenal glands so that they are unable to respond normally to stress.

**In each case the general advice given here is very important to your health.**

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## Your Treatment:

*You should be taking the following tablets:*

Tablet name:

- \_\_\_ tablet ( \_\_\_ mg) first thing in the morning. This should be immediately on waking, before getting out of bed or having anything to eat. Keep the tablets by your bed.
- \_\_\_ tablet ( \_\_\_ mg) at lunchtime
- \_\_\_ tablet ( \_\_\_ mg) in the evening, usually no later than 6.30pm.
- \_\_\_ tablet ( \_\_\_ mg) last thing at night as you go to bed.

## Important Things to Remember

Low *replacement* doses of steroids do *not* cause the same side effects as high steroid doses used to treat other conditions (such as severe asthma or arthritis). *There is also no reason to avoid vaccinations and immunisations - indeed they are probably more important than ever.* For replacement of adrenal deficiencies we are as careful as possible to make sure that we achieve normal healthy levels of hydrocortisone/cortisol in your blood (by carrying out a 'Hydrocortisone Day Curve') so that side effects and immune suppression are avoided. However, you will often hear about these side effects or precautions from family or friends – or find them mentioned in the drug information sheet included with the tablet. If you are worried, please discuss with a doctor or nurse in the clinic – but *don't* just stop taking the tablets.

Since people who are unable to make steroid hormones can become dangerously ill during the stress of illness, operations or accidents **it is very important that you do not suddenly stop the treatment, and that any doctor treating you knows that you are taking steroid tablets.**

- Always tell any doctor, or dentist, whom you consult that you are taking steroid tablets.
- Always carry a (blue) 'Steroid Replacement Treatment Card' in your pocket or bag. This gives details of your current dose of steroid tablets, and the names, addresses and telephone numbers of your family and hospital doctors. This is vital information for any doctor who has to look after you in an emergency (remember you could be unconscious).
- If you are on long-term treatment you should obtain and always wear a bracelet or necklace which is immediately visible to any doctor in an emergency. The best example is **MedicAlert** ([www.medicalert.org.uk](http://www.medicalert.org.uk) / 0800 581420 / 1 Bridge Warf, 156 Caledonian Road, London, N1 9UU). This organisation stores important facts about your illness and treatment, which are always available, by phone, to any doctor treating you in an emergency.
- **Do not stop your tablets suddenly**, as your body will not be able to 'take over'.
- Do not run out of tablets, always get a new prescription well in advance, and always keep a spare supply on you or at home. Think ahead! If you are going on holiday, particularly abroad, take your main supply in your hand luggage, but have a complete back-up supply in your main bags.
- If you are on long-term replacement, you should have a 'Hydrocortisone Emergency Kit' - an ampoule of hydrocortisone and water for injection, with a syringe and needle - to keep at home for emergencies.

### IF YOU BECOME UNWELL:

**If you have a mild illness** (e.g. a 'cold' or sore throat) with little or no fever (or high temperature), then usually no change in tablets is necessary. [However, if you feel unwell in a way that *you* recognise from previous experience as being due to steroid deficiency then it is always safest to increase the dose as a temporary measure]

**If you have a high temperature**, or are more unwell, (e.g. severe 'flu' which keeps you in bed), then double the dose of steroid tablets. Take twice the normal number of tablets, until you are well again - normally 2-3 days. See your family doctor during this time to make sure no extra treatment is needed. *Sometimes, if your illness is severe, or if you are on a very low dose of steroids, then you may need to triple the dose (but usually no more than 20mg three times daily)*

**If you are seriously ill**, or fail to improve, particularly if you have vomiting or severe diarrhoea which may prevent the tablets from getting into your body, then you will probably need a hydrocortisone injection. *You or your family can learn to give this using the hydrocortisone emergency kit.* Call your family doctor as an emergency. Ask for (or give yourself) an injection of hydrocortisone (100mg i/m, at once then every 6 hours) - show this sheet if necessary. Under these circumstances your doctor may well decide that you need to be admitted to hospital.

**If in doubt**, or if you have not improved after carrying out these instructions, ring the hospital (Leicester 254 1414) and ask to speak to Dr Howlett's Secretary or the Endocrine Specialist Nurse who will advise you. If you are unable to talk to a doctor or nurse, or if problems continue and you are getting worse then come to the hospital Emergency Department as soon as possible, bringing this sheet with you.