

## How to take your Prednisolone

The dose of Prednisolone described below is exactly the same as the amount of steroid hormone you would normally produce yourself. We give it in this way, which is opposite to the body's normal pattern (circadian rhythm), so that we can 'switch off' your own cortisol production. You are left with a **normal** total amount of steroid in your body.

### Reverse circadian rhythm Prednisolone:

Prednisolone: 1 tablet (5mg): take last thing at night in bed as you turn out the light.

Prednisolone: Half a tablet (2.5mg): take first thing in the morning before getting out of bed

**Remember: the Prednisolone tablets you take should be plain, flat and white.** If the Prednisolone tablets are coloured (red/brown) these are not suitable for you. The coating can prevent the tablets being absorbed properly from your stomach.

You may hear about *steroid side effect* from other people who are prescribed larger doses of steroids to treat conditions like asthma. You will not get these effects with the doses you are taking. **However, you can become steroid-deficient if you stop your treatment suddenly. Do not stop taking your tablets.**

**We will give you a steroid card and you must carry this with you at all times. You must not stop taking the tablets. You should also obtain a Medic Alert bracelet. (Phone 0800 0556504)**

## How to contact us

**Normal working hours:** The Endocrine Team 0161 446 3479 (9am to 5pm)

**At other times (5pm to 9am) and weekends:** **You should first** contact your own General Practitioner, or go to your local Accident & Emergency Dept.

If necessary, ring The Christie switchboard on 0161 446 3000 and ask for the Nurse Practitioner on call.



## Polycystic Ovary Syndrome

We hope you will find this leaflet useful. It explains what polycystic ovary syndrome is, lists the symptoms you may have and their causes. The leaflet also covers treatment and how this works.

If you have any questions about the leaflet or you are worried about any aspect of your treatment at The Christie, please talk to your doctor.

You can contact the Endocrine Team at The Christie on 0161 446 3479.

## What is polycystic ovary syndrome (PCOS)?

PCOS is so called because scans of the ovaries may show many small cysts. This does not mean that you have an 'ovarian cyst' which is a completely different condition.

PCOS is caused by an imbalance of hormones. These hormones are produced in the ovaries, adrenal gland and pituitary gland.

Women with PCOS can have a variety of problems and may have symptoms of:

- excess facial and body hair
- irregular or absent periods
- difficulty becoming pregnant.

PCOS is very common. Surveys show that nearly a quarter of women (including most women with slightly irregular periods) have a mild version of this condition which does not cause any symptoms or problems.

## How are hormones normally produced?

- **Pituitary gland** : This gland is connected to the underside of the brain. It controls many other glands in the body by producing a variety of stimulating hormones which are released into the bloodstream. These act upon:
- **Adrenal glands** : This gland produces the body's natural steroid hormone called cortisol. The adrenal gland is controlled by the pituitary hormone ACTH.
- **Ovary** : The ovary produces eggs and the normal female hormone oestrogen. The ovary is controlled by the pituitary hormones LH and FSH.

The adrenal gland and the ovary normally produce a small amount of male-like hormones called androgens. Men and women produce differing amounts of both male and female hormones.

## What happens when you have PCOS?

With PCOS, both the ovaries and the adrenal glands produce more of the male-like androgens than normal. This leads to excess hair growth and interferes with the normal cycle of ovulation and periods.

The changing levels of androgens in the blood has an effect on the pituitary hormones. More LH and FSH are produced, and sometimes more prolactin. This in turn causes more androgens to be made, so that a 'vicious circle' is set up.

We do not know whether this 'vicious circle' begins with the ovary, the adrenal or the pituitary part of the brain that controls it.

## Treating PCOS

The treatment depends on your symptoms but we aim to switch off the excess hormone production.

- **Oestrogen treatment** turns off the pituitary drive to the ovary. The synthetic oestrogen treatment stops your ovary producing its own oestrogen. But the overall increase in oestrogen levels offsets the excess androgens from the ovary.
- **Spirolactone** blocks the actions of male hormones.
- **Cyproterone acetate** blocks the effects of androgens on the skin and other tissues of the body. It is always given with oestrogens. **You must not become pregnant on this treatment.** The treatment is often slow to control excess hair growth. It usually takes at least 6 months and often up to a year to improve. The treatment continues for 1 to 2 years. After this, we hope that the cycle of PCOS will be suppressed.
- **Prednisolone** is a steroid hormone similar to cortisol. It is given in a way that turns off the pituitary control to the adrenal gland. It stops the adrenals producing cortisol and excess androgens. This treatment by itself should restore your regular periods. It may improve acne and it will begin to help with the problem of excess hair.

Prednisolone alone can help with fertility. However, we often need to add at a later stage drugs such as *clomiphene* and *HCG*, which stimulate the ovary to produce eggs.