

# Cyclophosphamide

(Information from the DEPARTMENT OF RHEUMATOLOGY, IMMUNOLOGY AND ALLERGY, Christchurch Hospital, Christchurch, New Zealand)

## WHY AM I BEING PRESCRIBED CYCLOPHOSPHAMIDE?

Cyclophosphamide is used for several different types of rheumatic disease, including systemic lupus erythematosus (SLE), diseases which inflame the walls of blood vessels (vasculitis) and sometimes for rheumatoid arthritis. It is a very powerful drug and may have effects on the immune system (the body's own defence system). One of its actions is to reduce the activity of the immune system, and it is only prescribed under very close supervision. Cyclophosphamide is often prescribed along with steroid tablets (eg prednisone).

## HOW DO I TAKE CYCLOPHOSPHAMIDE, AND WHAT DOSE WILL I BE PRESCRIBED?

There are several different ways in which cyclophosphamide can be prescribed. Your doctor will decide which is best for you and discuss this with you. The dose will depend on your body weight and may change depending on how you respond to the cyclophosphamide. The three main ways are as follows:

- (1) Low doses of tablets (usually taken once a day).
- (2) High doses of tablets taken less often (for example once every two weeks). Tablets should be taken with or after food (preferably in the morning or early afternoon). They should be taken with plenty of water (see later) and swallowed whole (not chewed).
- (3) By injection into a vein (intravenous injection). Your doctor will decide how frequently you should have these injections. The injections need to be given in hospital.

## HOW LONG WILL CYCLOPHOSPHAMIDE TAKE TO WORK?

Cyclophosphamide does not work immediately. It may take 6 weeks or more to produce an effect, depending on the illness for which it is being given.

## WHAT ARE THE POSSIBLE SIDE EFFECTS?

All drugs can cause side effects, although many patients never have them. Feeling sick (nausea) is a common side effect. Your doctor may prescribe medicine to reduce the sickness.

One very important side effect of cyclophosphamide is inflammation and bleeding of the bladder wall (haemorrhagic cystitis). If this occurs you may notice blood in your urine and you must report to your doctor immediately. To reduce the risk of this happening, you should increase the number of non-alcoholic drinks each day to the equivalent of 8 to 10 glasses of water.

Cyclophosphamide can also affect the blood count (one of the effects is that fewer blood cells are made). Taking cyclophosphamide can make you more likely to develop infections. If this happens or if you have a fever, unexplained bruising or bleeding you must tell your doctor immediately.

Other possible side effects are loss of hair, mouth ulcers, and irregular menstrual periods. If you develop these or any other new symptoms after starting cyclophosphamide, you should tell your doctor.

Because cyclophosphamide can make you more prone to infections, if you have not had chicken pox but come into contact with someone who has chicken-pox or shingles, you should report to your doctor immediately as you may need special treatment. If you develop chicken-pox or shingles you should report to your doctor immediately.

## **MONITORING TESTS**

Because cyclophosphamide can affect the blood and the bladder, your doctor will arrange for you to have regular blood and urine checks while on cyclophosphamide. You may be asked to keep a record booklet with your blood and urine test results. Bring this with you when you visit your general practitioner or the hospital.

## **ADDITIONAL INFORMATION**

- Some drugs interact with cyclophosphamide and you should always tell any doctor treating you that you are taking cyclophosphamide. You should not take 'over the counter' preparations without discussing this first with your doctor or pharmacist. However, many drugs can be safely taken with cyclophosphamide.
- Immunisation You should avoid immunisation injections which involve any of the live vaccines such as polio and rubella. These are used in immunisation against polio infection and German measles.
- Fertility Cyclophosphamide can reduce fertility in both men and women and so is used for young patients only with caution. The effect may be reversible if you stop taking cyclophosphamide.
- Pregnancy Cyclophosphamide should not be used while pregnant. Whilst taking cyclophosphamide, and for 6 months after treatment is stopped, both women and men must take contraceptive precautions. If you are planning a family or if you become pregnant while taking cyclophosphamide, you should discuss this with your doctor as soon as possible. You should not breast feed if you are taking cyclophosphamide.
- Alcohol There is no particular reason for you to avoid alcohol while taking cyclophosphamide (in moderate quantities of course).

If you would like any further information about cyclophosphamide, or if you have any concerns about your treatment, you should discuss this with your doctor or pharmacist.

**REMEMBER TO KEEP ALL MEDICINES OUT OF REACH OF CHILDREN.**