

## **Cyclosporin**

### **What is cyclosporin?**

Cyclosporin is a drug used in dermatology to reduce inflammation. It is effective in controlling common conditions such as eczema and psoriasis.

### **How does cyclosporin work?**

Cyclosporin works by reducing the numbers of T-cells in the epidermis that contribute to inflammation of the skin.

### **What is cyclosporin used for?**

Cyclosporin is effective in the treatment of psoriasis and atopic dermatitis and has been used on a case by case basis in a number of other conditions where there is inflammation of the skin.

### **Precautions when taking cyclosporine**

- You should not take cyclosporin if you have uncontrolled blood pressure problems or severe kidney disease.
- It is best to avoid cyclosporin if you are planning to become pregnant although several pregnant women have taken cyclosporin without any adverse effects.
- It is best to avoid cyclosporin if you know you are sensitive to it or have had previous reactions.
- Be cautious about taking cyclosporin if you have had an internal cancer previously or if you have received frequent treatment for skin cancer.
- It is best to avoid cyclosporin if you have an untreated or active infection.
- There are several medications that can interact with cyclosporin:
  - Drugs that increase the risk of side effects from cyclosporin include certain antibiotics (such as erythromycin, norfloxacin, doxycycline and cephalosporins), certain antifungals (such as ketoconazole), heart medications (such as diltiazem, verapamil), antihistamines (such as cimetidine), steroids and gout medication (allopurinol).
  - Certain drugs can reduce the effectiveness of cyclosporin. These include antibiotics (such as rifampicin) and anti-epilepsy medication (such as carbamazepine).
  - Certain drugs can affect kidney function and have to be used with caution when taken in combination with cyclosporin. These include: gentamicin, trimethoprim/sulfamethoxazole, vancomycin, and nonsteroidal anti-inflammatory drugs (such as indomethacin, ibuprofen and tacrolimus).

Please let your doctor know about all the medications you are taking so that the interaction of these drugs with cyclosporin can be considered.

In psoriasis and eczema cyclosporin is not used continuously for longer than 2 years to prevent permanent effects on kidney function and blood pressure.

### **Monitoring when you are taking cyclosporine**

Initially a number of tests will be performed to check for underlying problems before you start taking cyclosporin. These tests include a full blood count to check for liver and kidney function, electrolytes (salts in your blood), cholesterol, hepatitis B and C and HIV. You will also have a urine test. A chest X-ray may also be ordered to detect any evidence of past or current infection with tuberculosis.

Blood tests will be done regularly to monitor kidney and liver function, along with your blood pressure measurement to ensure you are coping with the medication. The frequency may be decreased to every 3 months if you are progressing well.

### **What to expect when taking cyclosporin and potential side effects**

- The most common side effect of cyclosporin is its effect on **blood pressure and kidney function**. You should have regular follow-up checks with your doctor, even if you are feeling well. Your doctor will regularly monitor your blood tests and blood pressure measurements and may decide to reduce the dose or discontinue cyclosporin depending on your readings and disease process. Most of the changes are reversible when you stop taking the medication.
- Long term risk of cancer: Theoretically there is an increased risk of developing skin cancers and internal cancers such as lymphoma as a result of taking cyclosporin. However most of the cases reported have been when cyclosporin has been used at much higher dosages than commonly used for dermatological disease.
- Theoretically cyclosporin can also reactivate some bacterial and viral infections or make active infections more difficult to treat.
- Other common side effects include:
  - Tremor
  - Headache
  - Pins and needles
  - Increased hair growth
  - Gum swelling
  - Nausea, stomach upset
  - Muscle and joint aches.
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If you notice any unusual side effects from the medication, please let your doctor know as soon as possible. Read the product information sheet that comes with cyclosporin and discuss any questions with your doctor.