

Cyclophosphamide

What is it?

- Cyclophosphamide can be used to treat various types of kidney disease. Cyclophosphamide was originally developed as a treatment for cancer and is still used for treatment of patients with cancer, but the doses used in kidney disease are lower than those used for cancer treatment.

Why did my doctor prescribe or recommend it?

- Healthy kidneys filter out excess water, salts, and waste products from the blood in our body. They do this through many tiny filters that the blood flows through. You have a kidney disease because your immune system is damaging these tiny filters causing them to scar up and stop working.

How does it work?

- Cyclophosphamide works by decreasing your immune system's response (weakening your immune system). The goal is to make the kidney disease less active before the inflammation leads to permanent kidney damage.

How long will I be on it?

- Most people require cyclophosphamide for 6 to 12 months although some may need it longer. The length of time cyclophosphamide is used for is kept to a minimum whenever possible because of the side effects that it can cause.

What doses are recommended?

- Take this medication as recommended by your doctor. The dosage is based on your medical condition, weight, response to therapy, the side effects you experience, and your level of kidney function.

Are there safety concerns?

- Cyclophosphamide may decrease fertility (decrease your chance of having children) in both men and women. Sterility is usually temporary with this medication but can be permanent. If you think that you would like to have children in the future talk to your kidney doctor. Women may also experience early menopause.
- This medication can lower the body's ability to fight an infection. Notify your doctor promptly if you develop any signs of an infection such as fever, chills or persistent sore throat. The doctor may put you on antibiotic to lower the chance of getting sick with an infection.
- Temporary hair loss or thinning of the hair may occur. Hair growth should return after treatment has ended or may even return during treatment. The new hair may have a different color or texture.
- Irritation of the bladder may occur. If you experience abdominal pain, difficulties peeing, or blood when you pee seek medical attention.
- Cyclophosphamide may decrease your white blood cells (cells that fight infections), platelets (cells that help your blood to clot), or your red blood cells (cells that deliver oxygen).
- Your kidney doctor will order regular blood tests to make sure that these cells do not drop too low. It is very important to do all the blood tests ordered while you are on cyclophosphamide.

- Cyclophosphamide may increase the risk of developing cancers such as lymphoma, leukemia, skin cancer, and bladder cancer. These cancers may occur during treatment and after the medication has been stopped. The risk of cancer is greatest in people who receive cyclophosphamide for more than 2 to 3 years.

While taking cyclophosphamide:

Do I need to take an antibiotic?

- Yes, you will likely take an antibiotic called sulfamethoxazole/trimethoprim (also called Septra or Bactrim) when on cyclophosphamide. This is given to prevent infections while your immune system is weaker. You will likely take this antibiotic for the entire time you are on cyclophosphamide. If you have an allergy to sulfa, your kidney doctor will prescribe a different antibiotic.

Should I get the flu vaccine AND pneumonia (Pneumovax) vaccine?

- Yes, cyclophosphamide can decrease the immune system. It is recommended to have the flu shot every year in the Fall. The pneumonia vaccine is recommended once at baseline and then one more time at year five to provide protection against the most common strains of pneumonia.

What else can I do?

TAKE IN THE MORNING WITH FOOD– Take cyclophosphamide in the morning with some food. Taking in the morning will reduce the risk of harm to your bladder and taking with food will help to prevent upset stomach. If you throw up or don't feel like eating when taking cyclophosphamide, call your Renal Health Clinic as we can prescribe medicine to prevent these side effects.

DRINK AT LEAST 8 GLASSES (240 mL each) OF WATER EACH DAY – Keeping well hydrated can reduce the risk of harm to your bladder.

GO TO THE BATHROOM FREQUENTLY – Go to the bathroom every 3 to 4 hours during the day and before bedtime to reduce the risk of harm to your bladder.

USE TWO FORMS OF BIRTH CONTROL – Cyclophosphamide can harm a developing baby so both women AND men must prevent pregnancy.

CLEAN YOUR HANDS FREQUENTLY – Cyclophosphamide can increase your risk of infections even if your white blood cell counts are normal. Washing your hands with soap and water or using a hand sanitizer before you eat and at other times throughout the day will help prevent infections.

TRY TO AVOID OTHER PEOPLE WITH INFECTIONS IF POSSIBLE – If someone you know is sick with a cold, flu, pneumonia, or other infection try to avoid visiting them until they are better. If someone in your house is sick then clean your hands frequently and, if possible, have another person care for them. This is especially important if your white blood cells are low or if you are also on high doses of prednisone.