Low White Blood Cells

What are white blood cells?

There are three main types of cells in your blood: white cells, red cells and platelets. White blood cells (WBC) help your body fight infections. When the count, or number of white blood cells is low, it is easier for you to get an infection.

Having a low white blood cell count is also called neutropenia (new-tro-pee-nee-ah).

What causes white blood cells to lower?

Many kinds of chemotherapy, some radiation therapy, and some cancers can lower your white blood cells (WBC). If your WBC drop, you may not get sick. Sometimes it lowers and then returns to a normal level without ever developing an infection. It is important to know that when your white blood cells drop, you need to protect yourself because there is a greater risk of developing an infection.

What are the risks of having low white blood cells?

When your WBC are low, you are not able to fight infections as well. Infections can make you very sick and may cause you to get a smaller dose of chemotherapy or even delay your next treatment.

What can I do to help protect myself from infections?

If you feel hot, have chills or sweats, take your temperature by mouth. If your temperature is at 38°C (100.4°F), call the Telephone Triage Nurse (TTN) or your family doctor right away. See "When do I call for help" in this pamphlet for more information.
The following tips can help you protect yourself against infection:

- Eat a well-balanced diet. Wash all fruits and vegetables. Avoid raw meat and fish.
- Drink at least 8 glasses of fluid a day.
- Wash your hands before eating and after using the toilet. Keep your hands out of your mouth.
- Do proper mouth care. Dilute 1 teaspoon of baking soda in 8 ounces of warm water. If you do not have baking soda, you can also dilute one teaspoon of salt in 16 ounces of warm water. Rinse your mouth before and after meals and at bedtime.
- Check with your doctor before you have any dental check-ups or work done on your teeth.
- Prevent constipation. If you need a laxative, ask your doctor, nurse or pharmacist for help. You should avoid rectal suppositories or enemas when your white blood cells are low.
- Shower or bathe daily, if you are able.
- Clean scrapes or cuts right away with soap and warm water.
- Stay away from people who have colds, flu or contagious diseases.
- Do not touch animal ‘droppings’, litter boxes or birdcages. Use rubber gloves if you must clean up after an animal.
- Do not work in the garden, unless you are wearing gloves.
- Do not share drinking glasses or eating utensils.

**Are there other methods for managing cancer-related neutropenia?**

In some cases, your doctor may order a treatment that is given by injection or IV. This treatment uses special proteins that help the bone marrow make more white blood cells, red blood cells, or even platelets. Growth factors work like your body does when it is healthy and normal.
When do I call for help?

If you develop any signs or symptoms of infection, you need to seek medical attention right away. Some of the signs and symptoms of infection include:

- Fever (temperature at or above 100.4°F or 38°C);
- Chills or shaking;
- Unusual sweating;
- Burning feeling when passing urine and/or more frequent urination;
- Redness, warmth, swelling or drainage from a wound;
- Cough with yellow or green coloured sputum (sticky mucus from the lungs);
- Sore throat and a fever;
- Diarrhea and a fever.

Monday to Friday from 8:30 a.m. to 4:00 p.m. call the London Regional Cancer Program’s Telephone Triage Nurse (TTN) at 519-685-8600 (press option ‘3’).

After hours, holidays, and on weekends, call your Family Physician or go to your nearest Emergency Department.

NS5892 (Rev. 2008/01/18) Updated December 4, 2012