Danbury Hospital

Danbury Hospital Patient Education Sheet

Symptom Management for Chemotherapy: Understanding Your Blood Count

How does chemotherapy work and how will it affect my blood cell count?

Cancer occurs when cells in the body divide and grow at an abnormally fast rate. Chemotherapy is the use of powerful medications that work by stopping these cells that divide more frequently.

Chemotherapy is a common treatment for many cancers and has been proven to be safe and effective. While chemotherapy is designed to kill cancer cells, it does not have the ability to select only cancer cells for destruction. There are some healthy cells in the body that also rapidly divide, which may be affected by chemotherapy. These include the body's bone marrow and blood cells:

- Red blood cells—which carry oxygen throughout the body
- White blood cells—which help the body to fight off infection
- Platelets—which help blood to clot and to stop bleeding.

What is being monitored when a complete blood count (CBC) test is drawn?

A CBC is ordered by your physician to monitor the effects of chemotherapy on your blood count to make sure your count is not too low. There are three main parts of the blood that are monitored. Each part has a different function:

Red Blood Cells (RBC's): The RBC's consist of hemoglobin and hematocrit (H/H), which carry and deliver oxygen from your lungs to the entire body. A low H/H is called anemia. The symptoms of anemia may include:

- Tiredness or weakness
- Dizziness
- Pale color to skin
- Shortness of breath
- Chest Pain
- Light headedness

What to do if you are anemic:

- Get plenty of rest
- Schedule short periods of activity and rest between activities
- Move slowly to avoid getting dizzy.

White Blood Cells (WBC's): The function of WBC's is to fight off infections and germs. The neutrophil is a part of the WBC that helps your body to fight infection. The "ANC count" or Absolute Neutrophil Count is monitored by your physician to determine how well you will be able to fight off infection. A low neutrophil count is called neutropenia (new-tro-pee-nee-a). The lower your ANC, the higher your risks are of getting an infection. The symptoms of an infection may include:

- Fever of 100.5 F or greater
- Cough
- Sore throat
- Mouth sores and/or blisters on the lips or skin
- Chills
- Unusual vaginal discharge and/or itching
- Diarrhea or loose bowel movements
- Burning with urination

What to do to prevent an infection:

- Avoid contact with large crowds and others whom have colds or infections
- Wash hands frequently and thoroughly throughout the day
- Avoid situations or activities where skin can be torn or damaged
- Clean cuts and scrapes right away with warm water, soap, and an antiseptic
- Do not eat fresh vegetables or fruits

- Use a straw to drink soda or juice from a can. Do not drink straight from the container.
- Food must be well cooked, such as steak and burgers/chop meat.
- Eat a well balanced diet
- Do not allow fresh cut flowers in your hospital room and/or home
- Increase fluid intake
- Maintain good oral and body hygiene
- Wear protective gloves when cleaning up after animals
- Do not take any immunizations or vaccinations without first checking with your physician.

Platelets: The function of blood platelets is to form clots and to prevent uncontrolled bleeding. A low platelet count is called thrombocytopenia (throm-bo-si-toe-pee-nee-a). Symptoms of a low platelet count may include:

- Easy bruising
- Nosebleeds
- Dark/black colored bowel movements
- Bleeding gums
- Red/purple spots on your skin or in your mouth

What to do when your platelet count is low:

- Use a soft or sponge-like toothbrush
- Shave with an electric razor
- Avoid contact sports
- Clean your nose by gently blowing
- Check with your doctor before seeing the dentist
- Do not walk barefoot
- Do not use aspirin or aspirin-like medications

How is a low blood count treated?

All parts of the blood are produced by your bone marrow inside your bones. There are medications such as erythropoietin (Procrit), filgrastim (Neupogen), and pegfilgrastim (Neulasta) that can stimulate your bone marrow to produce more blood cells. Your physician may also consider a blood or platelet transfusion depending on your test results and symptoms. Your physician will discuss these treatment options with you depending on your individual condition.

If any part of your blood count is ever low, your nurse or physician will inform you and will tell you what, if any, precautions are needed. Remember that your blood count is a simple and common test that will help your healthcare provider to care for you during your treatment. You are encouraged to use this as a guide and to talk with your nurse or physician whenever you have a question about your blood count or your overall condition.

Notes/Additional Information: _____

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Sources:
American Cancer Society @ www.cancer.org
Patient Education Institute @www.X-Plain.com
Praxair Cancer Center at Danbury Hospital, Danbury, CT.

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