

# Thrombocytopenia

## What is it?

*Thrombocytopenia* (low platelets) is a condition in which you have low levels of *thrombocytes*, blood cells that prevent bleeding. Platelets are produced in the bone marrow. Chemotherapy can affect your bone marrow, disrupting your body's ability to produce platelets.

Chemotherapy-induced thrombocytopenia typically occurs 6 to 10 days after chemotherapy and continues for several days before levels return to normal. If you develop thrombocytopenia and your platelets don't return to normal before your next chemotherapy cycle, your doctor may have to delay your treatment. Thrombocytopenia can also be caused by the cancer itself, radiation treatments, and certain medical conditions and medications (including blood thinners).

## What are the symptoms?

The symptoms of thrombocytopenia include:

- Pinpoint red, rashlike spots (*petechiae*) anywhere on your body
- Easy bruising
- Sudden bleeding from your nose or gums
- Blood in your stool or urine
- Unusually heavy menstrual bleeding

## How is it diagnosed?

Your doctor can diagnose thrombocytopenia with a *complete blood count* (CBC), which measures levels of the three basic blood cells: white cells, red cells, and platelets. A normal platelet count is about 150,000 to 450,000 platelets per microliter (mcl) of blood.

## How is it treated?

In most cases your body can tolerate a reduced platelet count without any medical intervention, except monitoring your blood work. If your platelet count becomes very low (less than 20,000) or you are experiencing bleeding, the following measures may be instituted:

- **Platelet transfusions.** This is like a blood transfusion, only with platelets in place of red blood cells. Transfusions solve the low platelet count, allowing your bone marrow to recover and make sufficient platelets.
- **Blood cell growth factors.** These proteins stimulate the cells in the bone marrow to produce more blood cells. Today, a synthetic version of blood cell growth factors called Neumega® (oprelvekin) is available. The drug has minimal side effects, except fluid retention (*edema*).



TIPS

## Tips to Help

If you develop thrombocytopenia:

- Avoid activities such as sports in which you could fall or get bumped or bruised.
- Use a soft-bristle toothbrush to keep your gums from bleeding.
- Use stool softeners to prevent straining with bowel movements, but don't use suppositories.
- Use an electric razor to reduce the risk of cuts.
- Don't take aspirin or aspirin products.
- Report any signs of bleeding to your doctor.
- Avoid forceful coughing or blowing of your nose.

## Words to Know

**Complete blood count (CBC):** Blood test that measures levels of white and red blood cells, and platelets.

**Edema:** Fluid retention or swelling.

**Petechiae:** Rashlike spots.

**Thrombocytopenia:** A condition in which you have low levels of blood clotting platelets.

**Thrombocytes:** Blood cells that prevent bleeding; also called platelets.