

Thrombocytopenia (Low Platelet Count)

■ What is thrombocytopenia?

Thrombocytopenia is a condition in which a person's blood has an unusually low level of platelets. Platelets, also called thrombocytes, are the cells that stop bleeding by helping the blood clot and plugging damaged blood vessels. These cells are made in the bone marrow. Normal platelet levels in your blood are important for your health.

■ What are the symptoms of thrombocytopenia?

People with thrombocytopenia may experience unexpected bruising, small purple or red spots under the skin, bleeding from the nose or gums, heavier than usual menstrual periods, black or bloody bowel movements, red- or pink-colored urine, bloody vomit, severe headaches, dizziness, pain in the joints or muscles, and increased weakness. Tell your doctor immediately if you experience any of these symptoms. Often, symptoms do not occur until the level of platelets is very low.

■ What causes thrombocytopenia?

Some types of chemotherapy and other medications damage the bone marrow, lowering its production of platelets. Thrombocytopenia caused by chemotherapy is usually temporary. Sometimes, a person's immune system destroys healthy platelets. Radiation therapy usually does not cause thrombocytopenia unless a significant amount of radiation is directed at the pelvis, the person is receiving chemotherapy at the same time, or the cancer has spread to the bones. Thrombocytopenia may also occur when cancer cells, such as leukemia or lymphoma cells, crowd out healthy bone marrow cells. Rarely, thrombocytopenia occurs when other cancers, such as prostate or breast cancer, spread to the bone marrow. Another uncommon cause of thrombocytopenia is enlargement of the spleen, which happens when the spleen traps too many platelets.

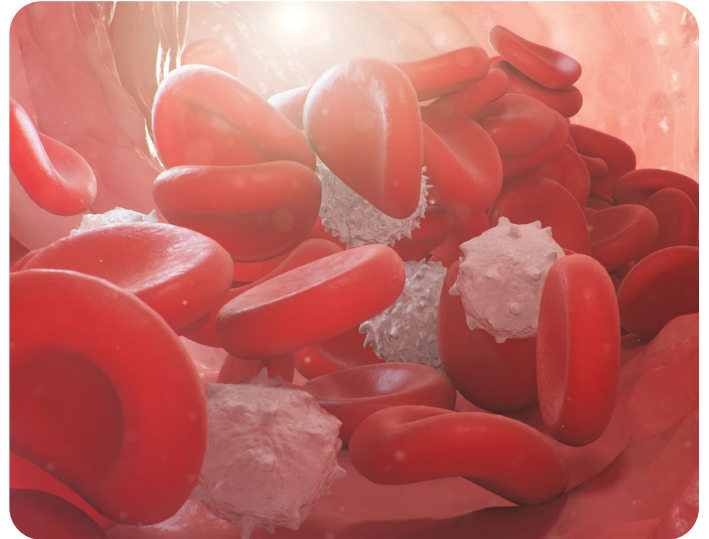
■ How is thrombocytopenia diagnosed?

Thrombocytopenia is diagnosed with a blood test that counts the number of platelets in a sample of blood. People with specific types of cancer or those having cancer treatment known to cause thrombocytopenia may receive regular blood tests to watch for it and other blood-related complications. Sometimes, other tests may be required to identify the specific cause of thrombocytopenia.

■ What are the treatment options for thrombocytopenia?

People whose platelet counts drop while receiving chemotherapy may switch to a lower dose or wait longer between chemotherapy cycles. Because of the risk of bleeding, the doctor may delay cancer surgery until platelet counts return to a normal level. In addition, people with a low level of platelets may receive a transfusion of platelet cells to prevent or treat heavy bleeding. However, transfused platelets only last about 3 days, and some people with thrombocytopenia may need multiple transfusions.

Along with treatment from your doctor, you can reduce the risks associated with thrombocytopenia by preventing bleeding (for example, taking care while shaving, brushing your teeth, or blowing your nose), not drinking alcohol, not taking medications such as aspirin or other blood thinners, and avoiding contact sports and other activities that might cause injury.



Questions to ask the health care team

Regular communication is important for making informed decisions about your health care. It can be helpful to bring someone along to your appointments to take notes. Consider asking your health care team the following questions:

- ▶ Does my cancer or cancer treatment put me at risk for developing thrombocytopenia?
- ▶ Will you test my blood to look for signs of thrombocytopenia?
- ▶ Can you explain my laboratory test results to me?
- ▶ What is causing my thrombocytopenia?
- ▶ What are my treatment options?
- ▶ What are the risks and benefits of each treatment?
- ▶ Would you recommend switching to a lower dose of chemotherapy or waiting longer between chemotherapy cycles?
- ▶ Are there medications you can prescribe to help prevent severe thrombocytopenia during chemotherapy?
- ▶ Do I need a transfusion of platelets?
- ▶ Are there any other steps that I can take to prevent complications from thrombocytopenia?
- ▶ If I have a question or problem, who should I call?

Find additional information and questions to ask the health care team at www.cancer.net/sideeffects. For a digital list of questions, download Cancer.Net's free mobile app at www.cancer.net/app.

Words to know

Bone marrow: Soft, spongy tissue found inside larger bones.

Chemotherapy: The use of drugs to destroy cancer cells.

Complete blood count: Blood test that evaluates the number of white blood cells, red blood cells, and platelets.

Hemorrhage: Spontaneous, heavy bleeding.

Nadir: Low point, often used in reference to blood cell counts.

Palliative care: The relief of side effects, also called supportive care.

Pathologist: A doctor who specializes in interpreting laboratory tests and evaluating cells, tissues, and organs to diagnose disease.

Petechiae: Small purple or red spots caused by bleeding under the skin.

Phlebotomist: A technician who collects blood samples for evaluation in a laboratory.

Radiation therapy: The use of high-energy x-rays or other particles to destroy cancer cells.

Transfusion: Process by which donated blood or blood components are transferred into a person's body through an intravenous line.

This fact sheet was developed and is © 2021 American Society of Clinical Oncology, Inc. (ASCO). All rights reserved worldwide. No sponsor was involved in the development of the content. The mention of any company, product, service, or therapy does not constitute an endorsement of any kind by ASCO or Conquer Cancer®, the ASCO Foundation. It is the responsibility of the treating physician or other health care provider, relying on independent experience and knowledge of the patient, to determine drug dosages and the best treatment for the patient. ASCO assumes no responsibility for any injury or damage to persons or property arising out of or related to any use of the fact sheet or any errors or omissions. Information in ASCO's patient education materials is not intended as medical advice or as a substitute for medical advice. Patients with health care-related questions should call or see their physician or other health care provider promptly and should not disregard professional medical advice, or delay seeking it, because of information encountered here. ASCO believes that all treatment decisions should be made between patients and their doctors. Advances in the diagnosis, treatment, and prevention of cancer occur regularly. For more information, visit Cancer.Net (www.cancer.net).

Health Care Professionals: To order more printed copies, please call 888-273-3508 or visit www.cancer.net/estore.

MADE AVAILABLE THROUGH

Cancer.Net[®]
ASCO | KNOWLEDGE CONQUERS CANCER

CONQUER CANCER[®]
THE ASCO FOUNDATION

AATB21

AMERICAN SOCIETY OF CLINICAL ONCOLOGY 2318 Mill Road, Suite 800, Alexandria, VA 22314
Toll Free: 888-651-3038 | Phone: 571-483-1300 | www.asco.org | www.cancer.net | www.conquer.org
© 2021 American Society of Clinical Oncology. For permissions information, contact permissions@asco.org.