

cancer.org | 1.800.227.2345

Thrombocytopenia (Low Platelet Count)

Platelets (also called thrombocytes) are blood cells that help blood to clot. When you're injured, clotting keeps you from losing too much blood. Having low platelets (also called **thrombocytopenia**) can increase your risk of bleeding problems.

- What causes thrombocytopenia or a low platelet count?
- What are the symptoms of a low platelet count?
- How are low platelet counts found?
- How are low platelets treated?
- What you can do if your platelet count is low
- Talk to your doctor or cancer care team

What causes thrombocytopenia or a low platelet count?

Low platelet counts can be caused by cancer, cancer treatments, or something other than cancer.

- Certain types of cancer treatment such as chemotherapy¹ or radiation therapy²
- **Certain cancers** such as <u>liver</u>³, <u>leukemias</u>⁴, <u>lymphomas</u>⁵, and <u>Waldenstrom</u> <u>macroglobulinemia</u>⁶
- Disorders that affect the bone marrow such as <u>myelodysplastic syndromes</u>⁷
 (MDS)
- **Immune problems** such as idiopathic thrombocytopenia purpura (ITP) or systemic lupus erythematosus (lupus)
- Infections such as Epstein-Barr virus (EBV), human immunodeficiency virus (HIV), and sepsis
- Liver problems such as cirrhosis or hepatitis
- Medicines such as nonsteroidal anti-inflammatory drugs (NSAIDs), aspirin,

anticoagulants (blood thinners), antibiotics, and antiseizure medicines

What are the symptoms of a low platelet count?

Low platelets (thrombocytopenia) can cause bruising and bleeding in people with cancer.

Some common signs and symptoms of low platelets are:

- Bleeding from the mouth, gums, nose, or rectum
- Blood in your body fluids (spit, vomit, stool, urine)
- Menstrual bleeding that is worse than a normal period
- More or worse bruises than usual
- Small red or purple dots on the skin, often on feet and legs (called petechiae)
- Severe headaches or blurred vision
- Weakness or dizziness that gets worse over time
- New confusion or signs of a stroke
- Pain in joints or muscles

Call your cancer care team right away if you notice any of these symptoms.

Keep in mind that people with cancer also have a higher risk of blood clots. Your cancer care team might talk to you about the need to balance the risk of bleeding with the risk of blood clots⁸.

Call 911 or go to the emergency room if

- You fall or hit your head while your platelets are low
- You have bleeding that won't stop
- You have new or worsening confusion

How are low platelet counts found?

During treatment, your cancer care team can check your platelet counts from time to time when you get a <u>complete blood count</u>⁹ (CBC). Ask your cancer care team if your type of cancer or treatments increase your risk of low platelets

How are low platelets treated?

Managing low platelets depends on the cause.

- A <u>platelet transfusion</u>¹⁰ might be needed if your platelets are very low or if you have signs of bleeding
- If chemo or other treatment is causing low platelets, the doctor might lower the dose, switch to a different treatment, or stop the treatment until your body recovers.
- If a health problem such as immune disorder or infection is causing low platelets, treating the health problem can help improve platelet counts.
- Certain medicines or procedures might be able to stop some causes of bleeding.

What you can do if your platelet count is low

If your platelet count is low, your cancer care team might suggest things you can do to prevent bleeding problems.

Protect yourself from injury

- Avoid doing things that could cause an injury, slip, or fall (such as sports, climbing ladders, walking on wet floors or ice).
- Use a soft toothbrush. Ask your cancer care team if it's okay to floss.
- Use an electric shaver (not a razor blade).
- Always wear shoes when you're outside.
- Keep your floor clear to prevent tripping, falling, or stepping on sharp objects.
- Be extra careful with sharp objects such as knives, scissors, or other tools.
- Prevent constipation¹¹ and hemorrhoids by using a stool softener.
- Don't put anything in your rectum (like enemas or thermometers).
- Don't blow your nose or cough forcefully.

Be careful with medicines and natural remedies

- Avoid medicines that thin the blood unless your doctor says you need to take them.
 This includes aspirin and NSAIDs such as ibuprofen and naproxen.
- Tell your cancer care team about all prescription and over-the-counter medicines you're taking.

• Tell them about any supplements, vitamins, or herbs you're taking since these also can affect the blood.

Talk to your doctor or cancer care team

Contact your doctor or cancer care team right away if you have:

- Dark or bright red vomit
- Red or black stools
- Dizziness, lightheadedness, or balance problems
- Been in bed for more than 24 hours

Hyperlinks

- 1. www.cancer.org/cancer/managing-cancer/treatment-types/chemotherapy.html
- 2. www.cancer.org/cancer/managing-cancer/treatment-types/radiation.html
- 3. www.cancer.org/cancer/types/liver-cancer.html
- 4. www.cancer.org/cancer/types/leukemia.html
- 5. <u>www.cancer.org/cancer/types/lymphoma.html</u>
- 6. www.cancer.org/cancer/types/waldenstrom-macroglobulinemia.html
- 7. www.cancer.org/cancer/types/myelodysplastic-syndrome.html
- 8. <u>www.cancer.org/cancer/managing-cancer/side-effects/low-blood-counts/blood-clots.html</u>
- 9. <u>www.cancer.org/cancer/diagnosis-staging/tests/understanding-your-lab-test-results.html</u>
- 10. <u>www.cancer.org/cancer/managing-cancer/treatment-types/blood-transfusion-and-donation/what-are-transfusions.html</u>
- 11. www.cancer.org/cancer/managing-cancer/side-effects/stool-or-urine-changes/constipation.html

References

American Society of Clinical Oncology (ASCO). Bleeding problems. Accessed at cancer.net. Content is no longer available.

Arnold DM & Cuker A. Diagnostic approach to thrombocytopenia in adults. *UpToDate*. UpToDate Inc; 2023. Updated October 2023. Accessed November 20, 2023. https://www.uptodate.com/contents/diagnostic-approach-to-thrombocytopenia-in-adults?

Arnold DM & Cuker A. Drug-induced immune thrombocytopenia. *UpToDate*. UpToDate Inc; 2023. Updated July 2023. Accessed November 20, 2023. https://www.uptodate.com/contents/drug-induced-immune-thrombocytopenia?

Arnold DM & Cuker A. Immune thrombocytopenia (ITP) in adults: clinical manifestations and diagnosis. *UpToDate*. UpToDate Inc; 2023. Updated July 2023. https://www.uptodate.com/contents/immune-thrombocytopenia-itp-in-adults-clinical-manifestations-and-diagnosis?

Kuter DJ. Megakaryocyte biology and platelet production. *UpToDate*. UpToDate Inc; 2023. Updated June 2023. Accessed November 20, 2023. https://www.uptodate.com/contents/megakaryocyte-biology-and-platelet-production?

Ma A. Approach to the adult with a suspected bleeding disorder. *UpToDate*. UpToDate Inc; 2023. Updated September 2023. Accessed November 20, 2023. https://www.uptodate.com/contents/approach-to-the-adult-with-a-suspected-bleeding-disorder?

Provan D, Arnold DM, Bussel JB, et al. Updated international consensus report on the investigation and management of primary immune thrombocytopenia. *Blood Adv.* 2019 Nov 26;3(22):3780-3817. doi: 10.1182/bloodadvances.2019000812.

Yuan S. Platelet transfusion: indications, ordering, and associated risks. *UpToDate*. UpToDate Inc; 2023. Updated November 2022. Accessed November 20, 2023. https://www.uptodate.com/contents/platelet-transfusion-indications-ordering-and-associated-risks?

Last Revised: April 3, 2024

Written by

The American Cancer Society medical and editorial content team (https://www.cancer.org/cancer/acs-medical-content-and-news-staff.html)

Our team is made up of doctors and oncology certified nurses with deep knowledge of cancer care as well as editors and translators with extensive experience in medical writing.

American Cancer Society medical information is copyrighted material. For reprint requests, please see our Content Usage Policy (www.cancer.org/about-us/policies/content-usage.html).

cancer.org | 1.800.227.2345