Anemia and Cancer Treatment

Anemia means the number of red blood cells is below normal. Red blood cells carry oxygen through your body, so anemia can make you feel very tired, short of breath, or lightheaded. Cancer treatments like chemotherapy and radiation therapy, and cancers that affect the bone marrow, can cause it. Blood tests check for anemia, and there are treatments that may help.

This page is for people having cancer treatment, and their caregivers, who want to understand anemia. It covers what it is, its signs and causes, ways to manage it, and when to get help.

What anemia is

Anemia is a condition in which the number of red blood cells is below normal. Red blood cells are the cells that carry oxygen from the lungs throughout your body to help it work properly. When you are anemic, your body does not have enough red blood cells to move oxygen the way it should.

Because oxygen reaches your body through red blood cells, having too few can leave you feeling drained.

Signs of anemia

Anemia can make you feel very tired, short of breath, and lightheaded. Signs of anemia may also include:

- feeling dizzy or faint
- headaches
- a fast heartbeat
- pale skin

These symptoms often build up slowly, so they can be easy to dismiss as just being tired from treatment. Tell your doctor if you are extremely tired or notice other signs of anemia. There are treatments that may help.

Why it happens during cancer treatment

Cancer treatments such as chemotherapy and radiation therapy can cause anemia. Cancers that affect the bone marrow—the soft tissue inside bones where blood cells are made—can also cause it. Blood loss, for example from bleeding, can also contribute.

You will have blood tests to check for anemia. A complete blood count checks your red blood cells and a related measure called hemoglobin, the protein in red blood cells that carries oxygen. Treatment for anemia is based on your symptoms and on what is causing the anemia. Because there can be different causes, your healthcare team looks at the whole picture before deciding what may help.

Ways to manage anemia

If you have fatigue caused by anemia, these steps may help:

- **Save your energy and ask for help.** Choose the most important things to do each day. When people offer to help, let them—they can take you to the doctor, make meals, or do other things you are too tired to do.
- **Balance rest with activity.** Take short naps during the day, but keep in mind that too much bed rest can make you feel weak. You may feel better if you take short walks or exercise a little every day.
- **Eat and drink well.** Talk with your doctor, nurse, or a registered dietitian to learn what foods and drinks are best for you. You may need to eat foods that are high in protein or iron.

Your healthcare team can tell you whether medicine, iron pills, a blood transfusion, or other treatments might help in your situation. Do not start iron pills or other supplements on your own. Iron only helps if low iron is the cause, and your team needs to know what you are taking.

When to get help sooner

- **Call 911 or go to an emergency department if** shortness of breath comes on suddenly, or it is bad enough that you struggle to talk, or you pass out. Do not drive yourself.
- **Call 911 or go to an emergency department if** you have chest discomfort, pain or pressure. Anemia makes the heart work harder, and chest pain is treated as a possible heart problem until testing says otherwise. Do not drive yourself.
- **Call 911 or go to an emergency department if** bleeding will not stop after firm, steady pressure. Do not drive yourself.
- **Call 911 or go to an emergency department if** your stools are black and tarry, you see a lot of blood in your stool, bleeding comes with dizziness or fainting, or you vomit blood or something that looks like coffee grounds. These can be signs of bleeding in the gut (MedlinePlus (medlineplus.gov/ency/article/003133.htm)). Do not drive yourself.
- **Call your care team at once, day or night, if** you are having chemotherapy and your temperature reaches 100.4°F (38°C) or higher. CDC describes this as a medical emergency, because fever may be the only sign of an infection and an infection during chemotherapy can be life-threatening. Keep the number for out-of-hours as well. If nobody can be reached quickly, go to an emergency department and say you are on chemotherapy as soon as you arrive.

- **Call your care team right away if** you have a fast or irregular heartbeat, or you feel dizzy or faint, including when you stand up.
- **Call your care team right away if** you see blood in your stool (MedlinePlus (medlineplus.gov/ency/article/003130.htm)), or red or pink urine (NCI (cancer.gov/about-cancer/treatment/side-effects/bleeding-bruising)).
- **Call your care team the same day if** you feel more short of breath than usual with simple activity, if tiredness keeps getting worse, or if your skin looks pale or your eyes look yellow.

It is worth reporting symptoms early rather than pushing through.

Sources

- National Cancer Institute — Anemia and Cancer Treatment (cancer.gov/about-cancer/treatment/side-effects/anemia)
- NHLBI — Anemia: Symptoms (nhlbi.nih.gov/health/anemia/symptoms)
- NHLBI — Anemia: Treatment and Management (nhlbi.nih.gov/health/anemia/treatment)
- National Cancer Institute — Bleeding and Bruising (cancer.gov/about-cancer/treatment/side-effects/bleeding-bruising)
- MedlinePlus — Gastrointestinal bleeding (medlineplus.gov/ency/article/003133.htm)
- MedlinePlus — Bloody or tarry stools (medlineplus.gov/ency/article/003130.htm)
- MedlinePlus — Breathing difficulty (medlineplus.gov/ency/article/003075.htm)
- MedlinePlus — Breathing difficulties, first aid (medlineplus.gov/ency/article/000007.htm)
- CDC — Watch Out for Fever (Preventing Infections in Cancer Patients) (cdc.gov/cancer-preventing-infections/patients/fever.html)

Source: National Cancer Institute (cancer.gov/about-cancer/treatment/side-effects/anemia)

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