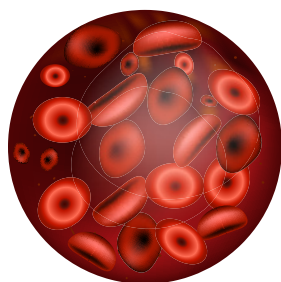
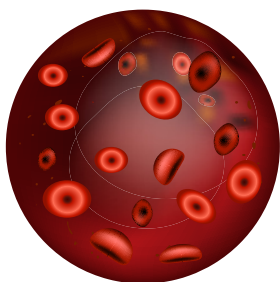


What You Should Know About Cold Agglutinin Disease (CAD)



Normal



Anemia

What Is Cold Agglutinin Disease?

Cold agglutinin disease, or CAD, is a rare condition in which the body's immune system mistakenly attacks and destroys its own red blood cells, or RBCs. When blood is exposed to colder temperatures, from 32 to 50 degrees Fahrenheit (0 to 10 Celsius), proteins that normally attack bacteria instead attach to RBCs and cause them to clump together and die.

CAD is 1 type of a condition known as **autoimmune hemolytic anemia**, or **AIHA**.

A problem with your body's natural defense, or immune, system and it attacks your own cells by mistake

Abnormally low number of RBCs

Autoimmune hemolytic anemia

From **hemolysis**, or destruction of RBCs

CAD can be caused by another condition, such as a viral infection, certain types of cancer, or unknown causes. It is a long-lasting, or chronic, disease that most often affects older adults. People with CAD, on average, live as long as people the same age who don't have CAD.

Recognizing CAD

The signs and symptoms of CAD are often related to anemia and blood circulation problems. They can include:

- Tiredness, or fatigue
- Muscle weakness
- Dizziness
- Sweating
- Shortness of breath
- Fast heartbeat
- Pale skin, or pallor
- Bluish fingers, toes, or ears after exposure to cold
- Brain fog

People with CAD sometimes have the symptoms of jaundice, a condition in which your body has too much of a substance called bilirubin. When RBCs are destroyed, they release bilirubin. Symptoms can include dark urine and yellowish coloring of the skin and eyes.

Getting a Diagnosis

Your doctor can tell whether you have CAD by drawing blood from you and ordering a number of blood tests, first to determine whether you have AIHA, and then whether it is CAD. If your doctor confirms that you have CAD, they can check to see if it is related to another condition.

CAD occurs when blood is exposed to cold temperatures, so it is important that your blood sample is kept warm -- 98.6 degrees Fahrenheit (or 37 degrees Celsius) -- until tested, and that it is tested right away. Be sure you or someone from your healthcare team lets the lab know. Because CAD is a rare disease, not all providers or labs are experienced at handling blood for CAD testing.



Treatment Options

Depending on how severe your symptoms are, CAD can be managed and treated in different ways.

- **Lifestyle changes:** Avoiding or protecting yourself against cold temperatures. This may even involve moving to a warmer location
- **Medicines:** Certain medicines can stop or slow the immune system from attacking RBCs
- **Intravenous immunoglobulin:** Immunoglobulins are proteins that help the body fight infections
- **Plasmapheresis:** A short-term treatment for symptoms in which blood is taken from your body and cleansed of the proteins, or antibodies, that attack RBCs, and then returned to your body
- **Blood transfusions:** Treatment in which you are given blood from another person, or donor, usually used only in emergencies

Another option is to join a **clinical trial**, which is a scientific study looking at ways to fight disease. Talk to your doctor about whether a clinical trial might make sense for you.

Questions to Ask Your Doctor

- ✓ How many patients with CAD have you seen?
- ✓ Will my condition worsen over time?
- ✓ What can I do to take care of myself?
- ✓ Will I need more blood tests? How often?
- ✓ What treatments are available?
- ✓ What are the possible side effects of treatment?
- ✓ Is there a clinical trial I can join?
- ✓ Where can I find more information and resources?