

INFORMATION FOR MEDICAL PROFESSIONALS

I HAVE COLD AGGLUTININ DISEASE - A RARE AUTOIMMUNE HEMOLYTIC ANEMIA

Cold agglutinin disease (CAD) is a rare form of autoimmune hemolytic anemia, where cold agglutinin autoantibodies (IgM) activate at temperatures **below normal core body temperature** triggering agglutination (clumping) of red blood cells and then destruction of red blood cells, causing hemolytic anemia. In addition, viral and bacterial infections cause hemolysis. (Berentsen, 2025; Despotovic & Kim, 2022).

MANAGEMENT IN MEDICAL SETTINGS

Avoidance of cold is extremely important. This must be kept in mind during hospitalization and surgery, when the CAD patient has less control over their ambient temperature and the temperature of intravenous solutions (Koyama et al., 2021; Ji et al., 2021).

- Ambient Room Temperature must be controlled. Breathing cold air can cause hemolysis. CAD patients may need even warmer temperatures requiring **Bair huggers**, space heaters, and continuously warmed blankets throughout surgery, post op, and hospital rooms.
- Intravenous solutions and blood products need to be warmed to an appropriate temperature (body temperature if possible) before infusion. For blood transfusions, the temperature **must** be warmed to body temperature but cannot be above 40°C. For those infusions that cannot be warmed, bring them to room temperature (Koyama et al., 2021; Yamaguchi et al., 2022).
- Liquids **without** ice should be given for drinking.
- Fever is to be treated with medications, **NOT** with ice or cooling blankets.
- Infections and viruses should be treated promptly.
- Check for Medical ID bracelets and wallet cards identifying Cold Agglutinin Disease with information such as: **No ice, warm all IV Fluids and Blood Transfusions, Keep me warm.**
- **Blood draw instructions – Warm vial to body temperature before drawing blood. Keep vial warm while drawing. Keep vial warm while transporting to lab. Test stat** (MLabs, n.d.; Medscape, 2025).
- Prednisone and Splenectomy **are not** effective treatments for Cold Agglutinin Disease. Hemolysis occurs in the liver and bloodstream, **NOT** in the spleen of CAD patients (Berentsen, 2025; The Blood Project, 2024).

SYMPTOMS MAY INCLUDE:

Painful Acrocyanosis-purple skin color of fingers, nose, ears, and toes

Livido Reticularis- purplish netlike coloration on the legs or body

Fatigue

Tea Colored/Dark Urine

Shortness of Breath

Whooshing in the Ears

Dizziness

Pale Skin

Jaundice

Blood Clots