

Symptoms

Acrocyanosis with Cold Exposure

[Acral-acorn with Cyan-crayon](#)

Livedo reticularis may also occur with cold agglutinin autoimmune hemolytic anemia and is described as having a purple-bluish lacy or mottled appearance.

Blue Fingers and Toes

[Blue Fingers and Toes](#)

In cold agglutinin autoimmune hemolytic anemia, agglutination and hemolysis tends to occur in peripheral locations on the body such as the fingers and toes. Skin color returns back to normal in these regions once it is warmed.

Diagnosis

Positive Coombs Test

[Positive Comb](#)

The Coombs test detects if a patient has formed autoantibodies to their RBCs. A Direct Coombs test involves mixing a patient's RBCs with test serum containing anti-IgM antibodies. If a patient has cold agglutinin autoimmune hemolytic anemia, their RBCs will be coated in primarily IgM and complement, thus anti-IgM in the test serum will agglutinate the RBCs. This reaction is referred to as a positive Coombs test.

Treatment

Avoid Cold

[Avoid Cold-thermometer](#)

Because cold agglutinin autoimmune hemolytic anemia occurs below body temperature, patients should avoid the cold.

Rituximab

[Red-tux-mob](#)

Rituximab is a monoclonal antibody against B cells, some of which produce autoantibodies.

+/- Fludarabine

[Fedora-bean](#)

Rituximab is typically used in combination with other immunosuppressants or other cytotoxic agents, such as fludarabine, a purine analog.