Cold Agglutinin Disease

Tap to explore
Instructions

This information is provided as an educational resource for healthcare providers. It is not intended to be a substitute for review of the underlying reference materials and scientific literature. Healthcare providers should make all treatment decisions based on their medical judgement and the clinical profile of the individual patient. The following document cannot be copied, modified, used or distributed without the express written consent of Bioverativ.
Cold Agglutinin Disease

- Burden of Cold Agglutinin Disease
- Clinical management
- The Immunobiologic Mechanisms
Cold Agglutinin Disease Is a Subtype of Autoimmune Hemolytic Anemia (AIHA)\(^{1}\)

In AIHA, autoantibodies target and destroy red blood cells\(^{2}\)

Cold Agglutinin Disease is associated with diverse symptoms that impact the daily lives of patients, including\(^{3}\)

- Fatigue
- Anemia
- Raynaud’s phenomenon
- Acrocyanosis
- Dyspnea
- Hemoglobinuria
- Weight loss
- Weakness
Cold Agglutinin Disease Can Result in Serious Consequences, Leading to Impaired Quality of Life

- Thrombotic events
- Severe anemia and chronic fatigue
- Transfusion dependency (>50%)
- Cold-related circulatory symptoms (91%)
- Severe Raynaud's phenomenon
According to a Retrospective Study From Stanford University, Cold Agglutinin Disease Leads to Increased Health Care Resource Utilization.²

100% Outpatient claims and services; 100% of patients; mean, 38 visits

100% Pharmacy utilization; 100% of patients; mean, 27 prescriptions

67% Hospital admissions; 67% of patients; mean, 3 admissions (mean, 5.8 days per stay)

53% Emergency department visits and services; 53% of patients

¹Retrospective longitudinal analysis of adults aged ≥18 years with cold agglutinin disease between 1993 and 2016 was conducted in Stanford’s health care database of >2.1 million patients. The aim was to better understand the patient and clinical characteristics of cold agglutinin disease, including temporal changes, particularly anemia severity, medication use, blood transfusion use, and health care resource utilization. Limitations: Reason for loss to follow-up not captured in database, some patients with severe anemia at onset could not be followed for a year or more. Only data from this single center were captured, therefore minimum levels of care were reported.
Anemia From Cold Agglutinin Disease Can Be Severe, Resulting in the Need for Multiple Transfusions

Retrospective analysis of cold agglutinin disease patients 1995-2016

- ~65% of patients had ≥1 blood transfusion
- Average of 11 transfusions per patient-year of follow up

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Anemia From Cold Agglutinin Disease Can Be Severe, Resulting in the Need for Multiple Transfusions

Percentages of patients with cold agglutinin disease who received transfusions as reported from 4 studies each examining 4–5 years of follow-up

Retrospective analysis of cold agglutinin disease patients 1995–2016:

- ~65% of patients had ≥1 blood transfusion
- Average of 11 transfusions per patient-year of follow-up

65% 48% 51% 80%

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The Risk for Thrombotic Events Is Increased in Patients With Cold Agglutinin Disease\textsuperscript{13}

of patients with cold agglutinin disease had thrombotic events compared with 20.2\% of patients with no diagnosis of cold agglutinin disease (\textasciitilde5.0001)\textsuperscript{13}.

The risk of thromboembolism was approximately 2-fold higher in patients with cold agglutinin disease\textsuperscript{13}.

There was a statistically significant increased risk for all the types of thromboembolic events that were evaluated (venous, arterial, cerebral)\textsuperscript{13}.

\textsuperscript{1}Retrospective longitudinal analysis of patients enrolled in the Optum health care plans between 2006 and 2016 by assessment of de-identified records from the Optum-Keumadica database. The aim was to compare patients with cold agglutinin disease with matched, non-cold agglutinin disease patients in order to understand the risk of thromboembolic events in those with the hemolytic disorder. Limitations: Analyses were conducted using claims-based data and may have included erroneous codes. Out-of-network visits were not captured, which may have resulted in missed diagnoses. Only the first incidence of each type of thromboembolic event were able to be accounted for, potentially leading to underestimation of thromboembolic events.
References