Cold antibody hemolytic anemia (CAHA) is a rare autoimmune disorder characterized by the premature destruction of red blood cells (rbcs) by the body's natural defenses against invading organisms (antibodies). Normally, the red blood cells have a life span of approximately 120 days before they are destroyed by the spleen. In individuals with CAHA, the red blood cells are destroyed prematurely and the rate of production of new cells in the bone marrow can no longer compensate for their loss. The severity of the anemia is determined by the length of time that the red blood cells survive and by the rate at which the bone marrow continues to create new red blood cell production. Although cold antibody hemolytic anemia is known to be an autoimmune disorder, neither its exact underlying cause nor the process by which the disorder becomes apparent is fully understood. Autoimmune disorders occur when the body’s natural defenses (antibodies, lymphocytes, etc.) against invading organisms suddenly begin to attack perfectly healthy tissue for unknown reasons. Cold antibody hemolytic anemia most commonly affects older people. The incidence of CAHA in the general population is about 1 in 80,000. There appears to be a slight bias in favor of females in the incidence of CAHA, with a male to female ratio of 2 to 3. Those individuals with infectious mononucleosis, lymphoproliferative diseases, or mycoplasma pneumonia are more susceptible to this disorder. In order to differentiate hemolytic anemia from the other anemias, doctors examine the patient's blood to determine the proportion of immature red blood cells, since the number of young cells is increased in hemolytic anemia. The patient is also examined to check for spleen or liver enlargement. An antiglobulin test (Coomb's reaction) may be performed as the initial screening exam to detect the presence of immunoglobulin or complement on the red-cell membrane and to determine the specific class of immunoglobulin or complement present. In the case of cold antibody hemolytic anemia, the Coomb's test is almost always positive for immunoglobulin M (IgM).