

Waldenström's macroglobulinemia (WMG) is a malignant disorder of the bone marrow and lymphatic tissues, a type of lymphoma and characterized by the presence of abnormally large numbers of a particular kind of white blood cell known as B lymphocytes. As these cells accumulate in the body, excessive quantities of an antibody protein known as IgM are produced. Large amounts of IgM cause the blood to become thick (hyperviscosity) and affects the flow of blood through the smaller blood vessels, leading to some of the symptoms of the disorder. Small blood vessels may tear leading to bleeding in the nose, gums, or retina. Symptoms of Waldenström's macroglobulinemia usually begin gradually. Common symptoms are fatigue and loss of energy due to anemia. Bleeding from the nose and gums may also occur, and tingling in the fingers and toes is often seen (peripheral neuropathy). Examination may also reveal enlarged liver, spleen, or lymph nodes. Blurring or vision impairment may also occur due to changes in blood flow through the blood vessels that serve the retina. The symptoms are quite variable depending on the effect of the thickened (viscous) blood on the organ involved. The causes of Waldenström's macroglobulinemia are unknown. There is evidence of occurrence within families, but such occurrence is uncommon. Waldenström's macroglobulinemia is a very rare disorder affecting about 1 in 3.4 million American men and about half that number of American women. The incidence of WMG is estimated to be about 5 per 1,000,000 people over the age of 50. The median age at diagnosis is 67. However, cases have been diagnosed in patients in their twenties. This disorder is considerably less common among people of African descent. When patients show symptoms of an enlarged spleen and liver combined with bleeding of the retina, WMG is reasonably suspected. The results of a complete blood count (CBC) usually show low red blood cell counts as well as low platelet counts. In such circumstances, electrophoresis (subjecting blood plasma to an electric impulse) of serum samples will show a peak reading for IgM.