About Waldenstrom's Macroglobulinemia – Highlights

Waldenstrom's macroglobulinemia (WM) is an indolent (slow-growing) subtype of non-Hodgkin Lymphoma that affects small lymphocytes (white blood cells). WM is rare, with an incidence rate of about 6 cases per million people per year in the United States.

WM probably begins with one or more acquired changes (mutations) to the DNA of a single B lymphocyte. The cancer causes the overproduction of a monoclonal protein called "immunoglobulin M" (IgM), which can result in a thickening of the blood known as "hyperviscosity." This monoclonal IgM protein and the presence of WM cells in the bone marrow, lymph nodes, and spleen may lead to many symptoms, including anemia, fatigue, unexplained weight loss, enlarged lymph nodes or spleen, weakness and unexplained bleeding.

Over 90 percent of WM patients have a mutation in the MYD88 gene in their lymphoma cells. The mutation turns on pathways that sustain the growth and survival of WM cells.

Over 30 percent of WM patients have a mutation in the CXCR4 gene, which promotes the WM cells to return to the bone marrow.

The exact cause of WM is unknown, although it is believed that genetics may play a role in disease development. Many patients with WM have a family member with WM or a closely related lymphoma, chronic lymphocytic leukemia (CLL), or multiple myeloma. The cancer occurs most commonly in people over age 60 years, is more frequently found in men than women, and is found in more Caucasians than in people of other races.

Some patients with WM do not have symptoms at diagnosis and may not require treatment for years. In these cases, patients are closely monitored for symptoms in an approach known as "watchful waiting" or "watch and wait." Active treatment is started only when symptoms appear.

There is no cure for WM, but the disease is treatable. Therapy regimens that include a combination of biological agents (treatment that stimulates the immune system to fight cancer), signaling inhibitors (drugs that block growth and survival signals), and chemotherapy have provided promising results. The safety and effectiveness of potential new therapies for WM patients, including the use of new drugs and drug combinations, are being researched in clinical trials. Ibrutinib is approved for the treatment of Waldenstrom's macroglobulinemia by the US Food and Drug Administration (FDA), the European Commission, and Health Canada.

For more information about WM, please see http://www.iwmf.com/about-wm.

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