OPEN ACCESS Freely available online

Journal Of Leukemia

ISSN: 2329-6917

Editorial

Acute Promyelocytic Leukemia: A Disease of Acute Myeloid Leukemia

Baum Eilot *

Department of Hepatobiliary and Pancreas, University of Toronto, Toronto, Canada

EDITORIAL NOTE

Acute Promyelocytic Leukemia (APL) is an aggressive type of acute myeloid leukemia in which there are too many immature blood-forming cells (promyelocytes) in the blood and bone marrow. This accumulation of promyelocytes leads to a shortage of normal white and red blood cells and platelets in the body. The signs and symptoms of APL include an increased risk of bleeding and forming blood clots. People may also experience excessive tiredness, pain in the affected areas, loss of appetite, and weight loss. APL generally occurs in middle-aged adults, but can be diagnosed at any age. It is caused by a mutation that is acquired throughout a person's life, usually involving a translocation between chromosomes 15 and 17. Treatment may include the use of All-Trans Retinoic Acid (ATRA) and arsenic trioxide or anthracycline-based chemotherapy.

APL is caused by a chromosomal translocation (rearrangement of material) that occurs in some of the body's cells during a person's life (a somatic mutation). Translocation involves the fusion of two genes: the PML gene on chromosome 15 and the RARA gene on chromosome 17. The protein produced by this fusion is called PML-RARα. The PML-RARα protein functions differently than normal PML and RARA genes typically produce. As a result of abnormal function, blood cells "get stuck" in the promyelocyte stage and proliferate (reproduce) abnormally. Then the excess promyelocytes accumulate in the bone marrow, disrupting the formation of normal white blood cells and leading to APL. Translocations involving the RARA gene and other genes have been identified in only a few cases of APL.

APL is not inherited. The condition arises from a translocation in some of the body's cells (somatic cells) that occurs after conception. This is known as a somatic mutation. Somatic mutations can affect the individual causing cancers or other diseases, but they are not passed on to offspring.

We were unable to locate information on the availability of predictive tests for APL. Predictive genetic testing is primarily an option for people at risk for inherited cancers and other inherited disorders; APL is not a hereditary cancer. Predictive genetic testing is generally available if a close relative has had a genetic test that has identified a specific mutation that is associated with an inherited predisposition to cancer. APL is caused by a somatic mutation that is acquired during a person's lifetime and is not passed on to children. Furthermore, it is not necessarily known when a somatic mutation may occur during a person's lifetime. People who are interested in learning more about predictive tests for a particular type of cancer should speak with a genetic professional.

We haven't got any information regards Predictive tests for APL. Predictive genetic testing is primarily an option for those people who at risk for inherited cancers and other inherited disorders; APL is not a hereditary cancer. This testing is generally available if a close relative having genetic test which identified a specific mutation that is associated with an inherited predisposition to cancer. APL is caused by a somatic mutation that is acquired during a person's lifetime and is not passed on to children. And, it is not necessarily known when a somatic mutation may occur in a person's lifetime. People who are interested in learning more about predictive tests for a particular type of cancer, they must reach to genetic professional.

Correspondence to: Baum Eilot, Department of Hepatobiliary and Pancreas, University of Toronto, Canada, E-mail: eilotbaum@gmail.com

Received: November 03, 2021; **Accepted**: November 17, 2021; **Published**: November 24, 2021

Citation: Eilot B (2021) Acute Promyelocytic Leukemia: A Disease of Acute Myeloid Leukemia. J Leuk. 9: e135.