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Leukemia - Acute Myeloid - AML - Overview [1]

This section has been reviewed and approved by the Cancer.Net Editorial Board [2], 08/2013

ON THIS PAGE: You will find some basic information about this disease and the parts of the body it may affect. This is the first page of Cancer.Net?s Guide to Adult Acute Myeloid Leukemia. To see other pages, use the menu on the side of your screen. Think of that menu as a roadmap to this full guide.

Leukemia is a cancer of the blood. Leukemia begins when normal blood cells change and grow uncontrollably. Acute myeloid leukemia (AML) is a disorder of the process that normally produces neutrophils, a type of white blood cell. AML may sometimes be called acute myelogenous leukemia, acute myelocytic leukemia, or acute nonlymphocytic leukemia. Unlike chronic leukemia, acute leukemia develops quickly and generally needs immediate treatment. AML occurs in people of all ages but is most common in adults older than 65.

About neutrophils

Neutrophils fight infections caused by bacteria. Mature neutrophils develop from immature (undeveloped) white blood cells in a process called differentiation. The production of mature neutrophils usually is highly regulated. For example, the body rapidly makes more neutrophils during an infection and returns to a regular level of production when the infection is controlled.

About AML

In AML, acquired mutations (damage to the genetic material or DNA) in the blood-forming cells cause problems with the normal development of the blood cells. This causes the build-up of many immature cells called myeloblasts or blasts. Blasts do not act like fully developed, healthy blood cells and do not help a person?s immune system work. The large number of blasts also reduces the production of healthy red blood cells (which carry oxygen) and platelets (cells that help the blood to clot). Therefore, people with AML are usually anemic (because they do not have enough red blood cells), more likely to get infections (because they do not have enough mature neutrophils), and bruise or bleed easily (because of a low level of platelets).

AML is usually found in the blood and bone marrow (the spongy, red tissue in the inner part of the large bones), but it can sometimes also spread to other parts of the body, such as the brain, skin, and gums. Occasionally, AML cells can form a solid tumor called a myeloid sarcoma or chloroma that can develop anywhere in the body.

This section is about AML in adults. Read about childhood AML [3].

Looking for More of an Overview?

If you would like additional introductory information, explore these related items. Please note these links take you to other sections on Cancer.Net:

- *ASCO Answers Fact Sheet [4]*: Read a one-page fact sheet (available in PDF) that offers an easy-to-print introduction to this type of cancer.
- Cancer.Net Patient Education Video [5]: View a short video led by an ASCO expert in leukemia that provides basic information and areas of research.
- Cancer.Net En Español [6]: Read about AML in Spanish. Infórmase sobre leucemia mieloide aguda en español [6].

Or, choose ?Next? (below, right) to continue reading this detailed section. To select a specific topic within this section, use the colored boxes located on the right side of your screen.

Links:
[1] http://www.cancer.net/cancer-types/leukemia-acute-myeloid-aml/overview
[2] http://www.cancer.net/about-us
[3] http://www.cancer.net/node/19051
[4] http://www.cancer.net/patient/Publications%20and%20Resources/ASCO%20Answers/ASCO_Answers_AML.pdf
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