Leukemia - Acute Myeloid - AML - Childhood - Subtypes [1]

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ON THIS PAGE: You will learn about how doctors determine the subtype of AML. To see other pages, use the menu on the side of your screen.

AML blasts are classified based on how much they look like healthy immature bone marrow blast cells, and more recently, on the molecular and genetic testing of the leukemia cells (see the Diagnosis [3] section). In the recent past, AML was divided into eight major subtypes according to a system called the FAB classification scheme, using levels M0 to M7, and was primarily based on their appearance. Now, a new method of subtyping AML is used that first takes into consideration the cytogenetic causes of AML. This is called the World Health Organization (WHO) 2008 classification. These subtypes include:

- Acute myeloid leukemia with recurrent genetic abnormalities
  - AML with t(8;21)(q22;q22); *RUNX1-RUNX1T1*
  - AML with inv(16)(p13.1q22) or t(16;16)(p13.1;q22); *CBFB-MYH11*
  - Acute promyelocytic leukemia (APL) with t(15;17)(q22;q12); *PML-RARA*
  - AML with t(9;11)(p22;q23); *MLLT3-MLL*
  - AML with t(6;9)(p23;q34); *DEK-NUP214*
  - AML with inv(3)(q21q26.2) or t(3;3)(q21;q26.2); *RPN1-EVI1*
  - AML (megakaryoblastic) with t(1;22)(p13;q13); *RBM15-MKL1*
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AML with mutated NPM1

- AML with mutated CEBP?

- Acute myeloid leukemia with myelodysplasia-related changes
- Therapy-related myeloid neoplasms
- Acute myeloid leukemia, not otherwise specified
  - AML with minimal differentiation
  - AML without maturation
  - AML with maturation
  - Acute myelomonocytic leukemia
  - Acute monoblastic/monocytic leukemia
  - Acute erythroid leukemia
    - Pure erythroid leukemia
    - Erythroleukemia, erythroid/myeloid
  - Acute megakaryoblastic leukemia
  - Acute basophilic leukemia
  - Acute panmyelosis with myelofibrosis
- Myeloid sarcoma
- Myeloid proliferations related to Down syndrome
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Transient abnormal myelopoiesis

- Myeloid leukemia associated with Down syndrome

Information about the cancer?s subtype will help the doctor recommend a treatment plan for your child. The next section in this guide is Treatment Options [4]. Or, use the menu on the side of your screen to choose another section, to continue reading this guide.

Links:
[1] http://www.cancer.net/cancer-types/leukemia-acute-myeloid-aml-childhood/subtypes
[2] http://www.cancer.net/about-us
[3] http://www.cancer.net/node/19056
[4] http://www.cancer.net/node/19058