Acute Myeloid leukemia

Leukemias, the most common cancer in children, are malignant neoplasms that arise from clonal proliferation of abnormal hematopoietic cells leading to disruption of normal marrow function leading to marrow failure.

Two main types of leukemia are acute lymphoblastic leukemia (ALL) and acute myeloid leukemia (AML) depending on the nature of blasts which are cancer cells (lymphoid/myeloid).

What is acute myeloid leukemia (AML)

AML is the second most common type of leukemia in children, accounts for 15-20% of leukemia in children. AML is complex disease and results from clonal proliferation of hematopoeitic precursors of myeloid, erythroid and megakaryocytic lineage.

What causes AML

The etiology of acute leukemia remains unknown in a majority of cases. However, several genetic syndromes have been associated with an increased risk of leukemia like Down syndrome, Fanconi anemia, Schwachman Diamond syndrome, Bloom syndrome, Ataxia telangiectasia, Diamond-Blackfan anemia, Severe combined immune deficiency

What are the signs/ symptoms of AML

Fever, Pallor, fatigue, bleeding , petechiae, hepatomegaly and splenomegaly ,bone pain , convulsions, nerve palsy ,stroke, respiratory dificulty, infections, proptosis

How is it diagnosed?

Peripheral blood and bone marrow examination (morphology, immunephenotype for subtype classification of AML),cytogenetics and molecular diagnostics

Why did it happen to my child ?.Is it an infectious disease

There is no answer to this. The cause for AML remains unclear except that it may be associated with certain genetic syndromes. This is not a infectious disease

What is the treatment of AML

AML is treated with chemotherapy (medicines used for cancer treatment and administered via intravenous, intramuscular or intrathecal route)

How long does the treatment last?

The treatment lasts for approximately 6-8 months

What are the chances of survival ? Can the disease come back

5-year patient survival ranges from 30-40% in our country (varies in different centers).The disease may come back after treatment has completed: this is known as relapse

IS there any way by which the outcome can be predicted?

Ask your doctor to explain this

Genetic Abnormality	Frequency (%)	Clinical Features	Overall Survival (%)
Rearrangements (genes)			
t (8;21)(q22;q22) (ETO-AML1)	12	Chloromas common	75-85
inv(16)(p13;q22) (MYH 11-CBF)	8	Eosinophilia	75-85
t(15;17)(q22;q12) (PML-RAR)	12	FAB M3, Auer rods, ATRA sensitive	90
Normal karyotype , gene mutations			
NPM (nucleophosmin)	8-10		75-85
CEBPα	4-6	FAB M1, M2	80
FLT 3- ITD	10-15		<35
WT1	8-10		35-55
Poor risk cytogenetics			
Del 5q	1		<35
Monosomy 7	2		<35

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Make arrangements for stay in Delhi
Donate blood for your child
Understand outcome of disease in your child
Discuss the cost of treatment with your doctor
Discuss regarding need for BMT for your child with your doctor
Take the Sick card from your doctor
Your child will need follow up even after treatment is over

Contact us: Helpline No. 9810590067 **Email: c3sambhav@gmail.com**

Teleconsultation - 011-26588798 (1st & 3rd Friday–every month)

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