Acute lymphoblastic 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 lymphoblastic leukemia (ALL)

ALL is the most common childhood malignancy accounting for one-fourth of all childhood cancers and 75-80% of acute leukemia

What causes ALL

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 symptoms of ALL

Fever, Pallor, fatigue, petechiae, lymphadenopathy, hepatomegaly and splenomegaly ,bone or joint pain , limp or refusal to walk, tachypnea and respiratory distress, skin rash/eruption, convulsions, nerve palsy ,renal involvement or testicular enlargement

How is it diagnosed?

Peripheral blood and bone marrow examination (morphology, immunephenotype(B/T lineage),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 ALL remains unclear except that it may be associated with certain genetic syndromes. This is not a infectious disease

What is the treatment of ALL

ALL is treated most commonly with chemotherapy (medicines used for cancer treatment and administered via intravenous, intramuscular or intrathecal route) Sometimes radiation is given to brain (in high risk cases) and testes (testicular enlargement).

How long does the treatment last?

The treatment lasts for approximately 2-2.5 years

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

5-year patient survival ranges from 50-60% in our country (varies in different centers).The disease may come back in 15-20% cases 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

Feature	Standard risk	High risk
Age	2-10 years	<1 year,>10 years
Sex	Female	Male
Initial white cell count	<50000/cmm	>50000/cmm
Hepatosplenomegaly	Absent	Massive
Lymphadenopathy	Absent	Massive
Mediastinal mass	Absent	present
CNS Leukemia	Absent	Present
Phenotype	Pre B (T-cell intermediate)	Mature B –cell
Ploidy	Hyperdiploidy	Hypodiploidy
Cytogenetics	t(12;21),trisomy 4 and 10	t(9;22), t(4;11),t(8;14)
Response to treatment	Good early response	Poor early response
Minimal residual disease (MRD) after 1st induction	Negative	Positive

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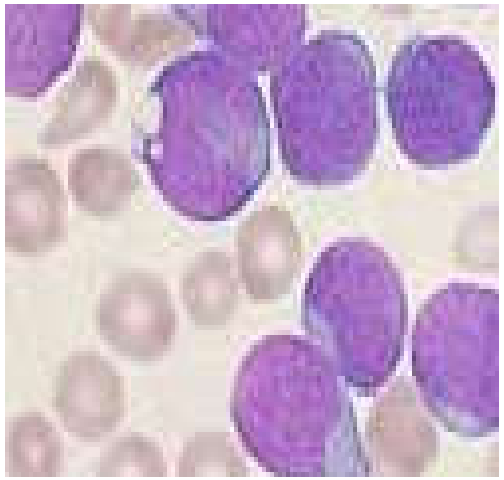

Make arrangements for stay in Delhi
Donate blood for your child
Understand outcome of disease in your child
Discuss the cost of treatment with your doctor
Take the Sick card from your doctor
Your child will need follow up even after treatment is over

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

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

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