

Leukemia

Introduction to Leukemia:

There are four main types of leukemia that vary based on treatment methods and their responsiveness to the treatment. They are:

- Acute Myeloid Leukemia.
- Acute Lymphocytic Leukemia.
- Chronic Myeloid Leukemia.
- Chronic Lymphocytic Leukemia.

Leukemia symptoms can vary from one patient to another, but generally, most patients will experience one or more of the following symptoms:

- Fever
- Night sweats
- Frequent infections
- Weight loss
- Headaches
- Joint pain
- Hemorrhage
- Skin bruising
- Swollen lymph nodes
- Extreme fatigue

Causes:

Scientists do not yet understand the exact causes of leukemia. It seems to develop from a combination of genetic and environmental factors.

However, this type of cancer is not hereditary.

Risk factors:

The following factors may increase the risk of developing leukemia:

- Exposure to high energy radiation from an atomic bomb or a nuclear power plant.
- Exposure to certain chemicals, such as benzene or formaldehyde.
- Blood disorders.
- Exposure to chemotherapy or radiation therapy.
- Genetic disorders such as Down syndrome.
- Some types of viruses can cause tumors, such as the hepatitis B virus and the HIV virus.
- Family history of leukemia, but this is very rare.

Diagnosis:

To diagnose leukemia, doctors use certain diagnostic tests and procedures, such as:

- Physical examination: Doctors examine the lymph nodes, spleen and liver to check if there is any swelling.
- Blood tests: Blood tests determine the number of blood cells and platelets. They are also used to identify any abnormalities in the blood cells.
- Bone marrow biopsy to check for cancer cells.
- Genetic testing to examine the genetic material in the bone marrow, blood cells and lymph nodes.

- Lumbar puncture (spinal tap): to collect cerebrospinal fluid and detect any cancer cells in another fluid that surrounds the brain and spinal cord.

What are the treatment options for leukemia?

Leukemia treatment methods depend on several basic factors, like age, overall health, type of leukemia and whether or not it has spread to other parts of the body. Common treatments used to fight leukemia include:

- Chemotherapy.
- Radiation therapy.
- Stem cell transplant, which replaces the cells that were damaged during radiation therapy and chemotherapy.
- Immunotherapy: this type of treatment is given to enhance the body's immunity.

Prevention:

Less exposure to radiation, chemicals and viral infections may reduce the risk of leukemia.

Coping with the disease:

- The patient can better cope with the disease and overcome the treatment stage by communicating and cooperating with the medical team. This can be achieved through getting as much information about leukemia as possible before making any decisions about your health. Asking your doctor about the type of leukemia you have and all available treatment options you have in order to increase your confidence in your decisions about the treatment.
- Do not hesitate to ask for support from friends and family so you can get the assistance that you need during both the different stages of treatment, and if you face any complications.



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- Discuss your concerns and fears with your doctor or close friends and family members and ask for their advice regarding your current situation.
- Seek help and consultation from a social worker.
- Spend time reading Quran and supplicating or read some useful books.

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