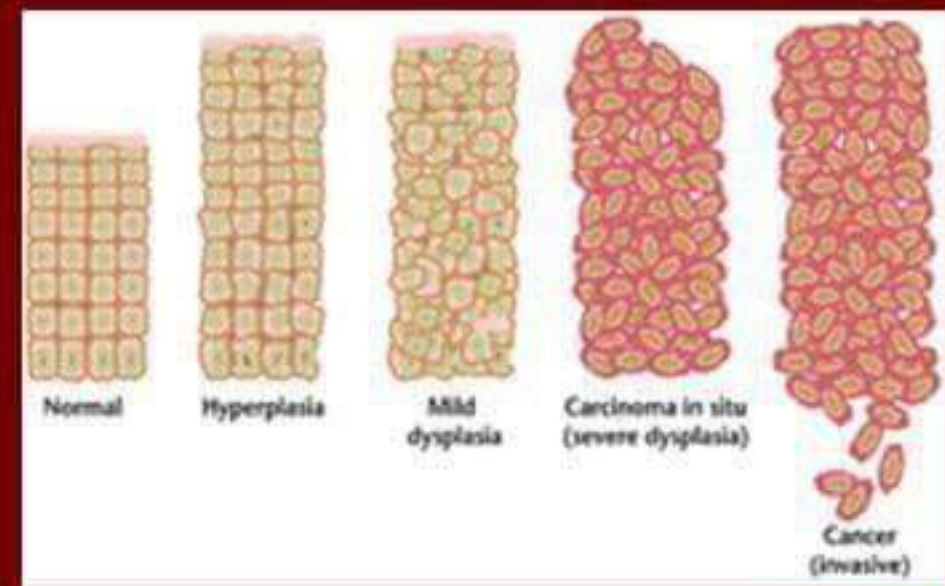


# What is leukemia?

- form of cancer
- three types of cells
  - Red blood cells
  - White blood cells
  - Platelets



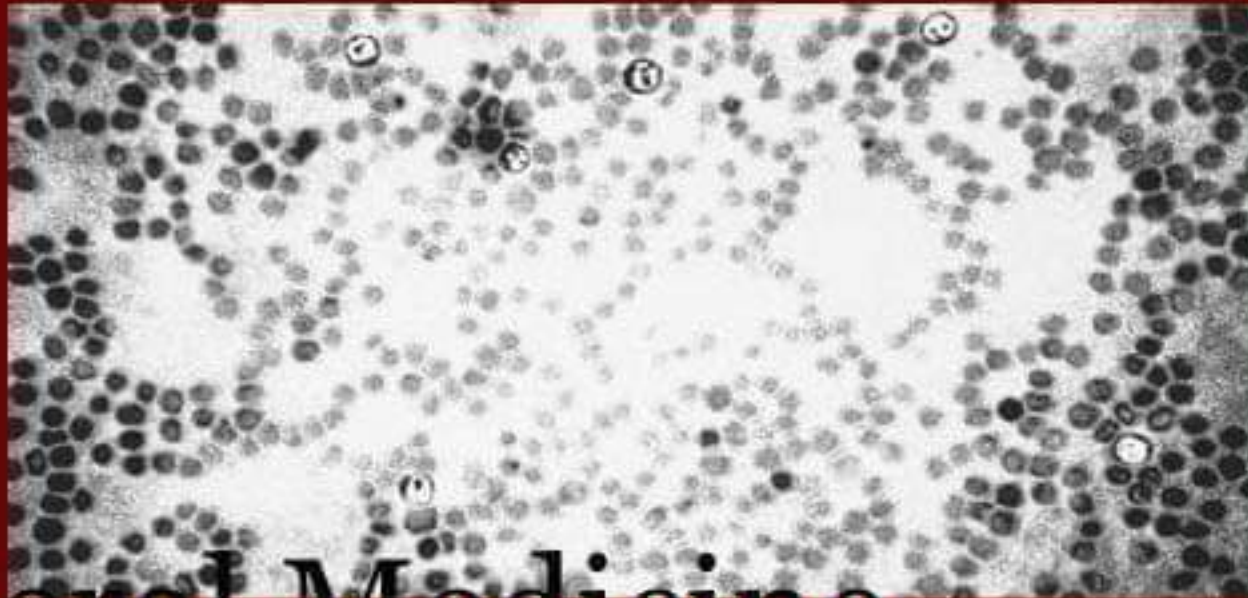
Example of progression  
of cancer





# How is leukemia diagnosed?

- 1) Described symptoms
- 2) Blood test
- 3) Bone marrow biopsy – specific test
- 4) Lumbar Puncture (spinal tap)



# What are possible causes of leukemia?

- Radiation
- Chemicals
- Viruses
- Genetic factors
- Immunologic factors

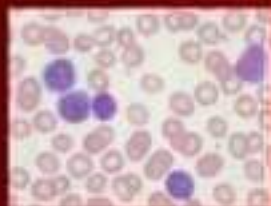


# TYPES OF LEUKEMIA

Leukemia is either chronic (which usually gets worse slowly) or acute (which usually gets worse quickly):

**Chronic leukemia:** Early in the disease, the leukemia cells can still do some of the work of normal white blood cells. People may not have any symptoms at first.

Step 1:



Fewer sign

Step 2:



Spread slowly

**Acute leukemia:** The leukemia cells can't do any of the work of normal white blood cells. The number of leukemia cells increases rapidly. Acute leukemia usually worsens quickly.

• Step 1:



Fewer sign

Step 2:



rapidly spread

## CONTINUATION OF TYPES OF LEUKEMIA

- leukemia also can be grouped based on the type of white blood cell that is affected. Leukemia can start in lymphoid cells or myeloid cells
- There are four common types of leukemia:
- **Chronic lymphocytic leukemia** (CLL): CLL affects lymphoid cells and usually grows slowly. Most often, people diagnosed with the disease are over age 55. It almost never affects children.
- **Chronic myeloid leukemia** (CML): CML affects myeloid cells and usually grows slowly at first. It accounts for nearly 6,000 new cases of leukemia each year. It mainly affects adults.
- **Acute lymphocytic (lymphoblastic) leukemia** (ALL): ALL affects lymphoid cells and grows quickly. ALL is the most common type of leukemia in young children. It also affects adults.
- **Acute myeloid leukemia** (AML): AML affects myeloid cells and grows quickly. It occurs in both adults and children.



# SYMPTOMS OF LEUKEMIA

Like all blood cells, leukemia cells travel through the body. The symptoms of leukemia depend on the number of leukemia cells and where these cells collect in the body. People with chronic leukemia may not have symptoms. The doctor may find the disease during a routine blood test.

- People with acute leukemia usually go to their doctor because they feel sick. If the brain is affected, they may have headaches, vomiting, confusion, loss of muscle control, or seizures. Leukemia also can affect other parts of the body such as the digestive tract, kidneys, lungs, heart, or testes.

**Common symptoms of chronic or acute leukemia may include:**

1. Swollen lymph nodes (especially lymph nodes in the neck or armpit)
2. Fevers or night sweats
3. Frequent infections
4. Feeling weak or tired
5. Bleeding and bruising easily (bleeding gums, purplish patches in the skin, or tiny red spots under the skin)
6. Swelling or discomfort in the abdomen (from a swollen spleen or liver)
7. Weight loss or loss of appetite for no known reason
8. Pain in the bones or joints
9. Shortness of breath

**Fb/General Medicine**

## TREATMENT OF LEUKEMIA

People with leukemia have many treatment options.

- i. watchful waiting
- ii. chemotherapy
- iii. targeted therapy
- iv. biological therapy
- v. radiation therapy
- vi. stem cell transplant.

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