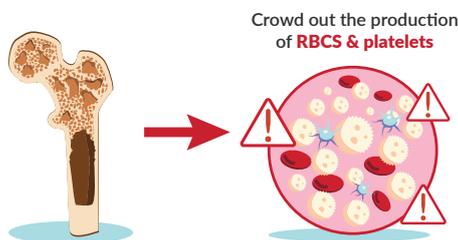


Pathophysiology

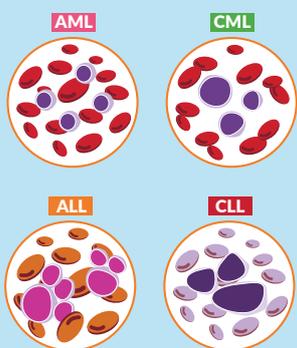
Leukemia is a type of cancer that affects the **blood cells & bone marrow**. Bone marrow is responsible for making blood cells: WBCs, RBCs, platelets. In Leukemia there is an **overproduction of white blood cells (WBCs)** that crowd out the production of normal cells, leading to low RBCs & low platelets.



Leukemia

- Leuk = Leukocyte (WBC)
- emia = blood

Main Types

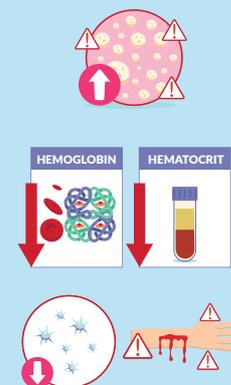


- AML** - Acute myeloid Leukemia
Pediatrics more common
- CML** - Chronic myeloid Leukemia
- ALL** - Acute Lymphocytic Leukemia
- CLL** - Chronic Lymphocytic Leukemia

Labs

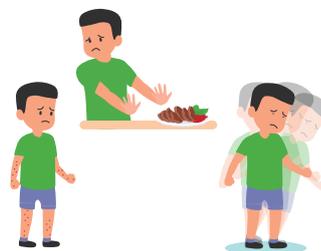
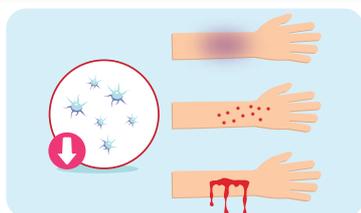
Labs

- High WBCs
- Low H/H
- Low Platelets



Signs & Symptoms

- **Frequent infections**
- **Fatigue**, Unsteady Gait, Pale "Pallor"
- **Bruising**, Petechiae, & easy Bleeding
- Weight Loss & **Anorexia**
- Bone pain



ATI Question

A nurse is assessing a child who has leukemia. Which of the following findings should the nurse expect? Select all that apply.

- Anorexia
- Petechiae on the extremities
- Unsteady gait

ATI Question

7-year-old with acute lymphoblastic leukemia who is being admitted for evaluation of fever. To which of the following rooms should the nurse assign the client?

- **Private room** in order to prevent transmission of infection from others

Diagnostics

Bone marrow biopsy
Taken from the posterior iliac crest



HESI Question

A nurse preparing a patient for a **bone marrow biopsy** knows which site will most likely be used?

- **Posterior iliac crest**

Treatment

Radiation & Chemotherapy to kill the cancer.
Rarely: Stem cell transplant - like hitting the restart button to reboot the bone marrow.

