



It is decreasing in blood volume, erythrocyte count, hemoglobin amount (hematocrite value).

It is not a disease in itself, but a symptom that is a result of various diseases.

Anemia is common in metastatic neoplastic disease anad is often responsible for significant part of the clinical illness of the terminally illness.

### GENERAL ANEMIA

#### Etiology is different.

Bone marrow failure (aplastic anemia)

Iron, copper, protein deficiency (nutritional anemia)

Reduced blood volume and erythrocyte count (hemorrhagic anemia) due to hemorrhagic blood loss.

Reduction of erythrocytes by various reasons (hemolytic anemia)

In this way, infectious (such as anemia infection, leptospirosis, blood protozoon parasites), isoimmun (such as blood group disagreement) and autoimmune, toxic, hereditary, and hemolytic anemia are distinguished. According to time

Acute: Severe hemorrhagic anemia Severe hemorrhagic hypovolemic results in shock.

**Chronic :** Chronic heart hypertrophy dilatation, respiratory distress, pulmonary edema, edema (hypoproteinemia end) Mucosal pallor and spleen changes.

According to erythrocytes' morphological appareance

Erythrocyte shape, Hb amount is considered. However, when the disease improves or progresses.

According to the size of erythrocytes

Macrocytic Microcytic Normacytic Hypochromic anemia

Decrease in the amount of hemoglobin in erythrocytes; hypochromic Macrocytic, microcytic or normacytic hypochromic anemia

# I. Related to the loss of red blood cells

A. Posthemorrhagic (internal bleeding)

- a. Primer Trauma
- b. Secunder Aorta aneurism; rupture of the spleen resulting from liver amyloidosis. Lead toxicity

#### **B.** Hemolitic anemia

- 1. Toxic
- 2. Infectious
- 3. Immunhemolitic
- 4. Idiopatic (sebebi bilinmeyen)
- 5. Secunder factors

# II Related to production of red blood cells

## **A. Nutritional B. Aplastic** (aplasie at bone marrow ...)

## LOCAL ANEMIA ( OLIGEMIA VE ISCHAEMIA )

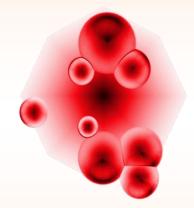
Local anemia involves a tissue or an organ in a region of the body.

Related to vascular malfunction.

Local anemia is defined as the oligemia and ischaemia in anemia.

Oligemia (oligemia): A disorder of the blood vessels is the result of low blood flow to a tissue.

Ischaemia (ischemia): It is also the case that there is no blood going to the organ or tissue due to the vascular malfunction, for example, the total occlusion of the vein. Necrosis of the tissue (infarctus)



# INFARCTUS (INFARCTION)

## INFARCTUS

Infarction is a local area of ischemic necrosis in a tissue caused by occlusion of the arterial supply or venous drainage.

It is usually formed in organs with insufficient veins, without collateral connections.

As a result of embolism, thrombosis or spasm, a complete blockage of the artery does not lead to the region where the endothelium feeds, and ischemia (local anemia) develops.

The coagulation necrosis on the side of the occluded vein is called infarct.

#### ACCORDING TO MORPHOLOGY Anemic infarction

Artery blockage in organs such as the heart, kidney, spleen, brain is the result. It appears pale from the beginning.

#### Hemorrhagic infarction

Occurs when the venous system is obstructed. This is most commonly seen in the lungs. It also occurs in the testes and ovaries. It is reddish due to blood stagnation.

**ACCORDING TO TIME** 

New (acute), old (chronic)