

Lab:4

Tissues

Tissue: It is a group of cells similar in shape and function.

There are four main chief tissues in the body.

- 1- Epithelial tissue
- 2- Connective tissue
- 3- Muscular tissue
- 4- Nervous tissue

Epithelial tissue

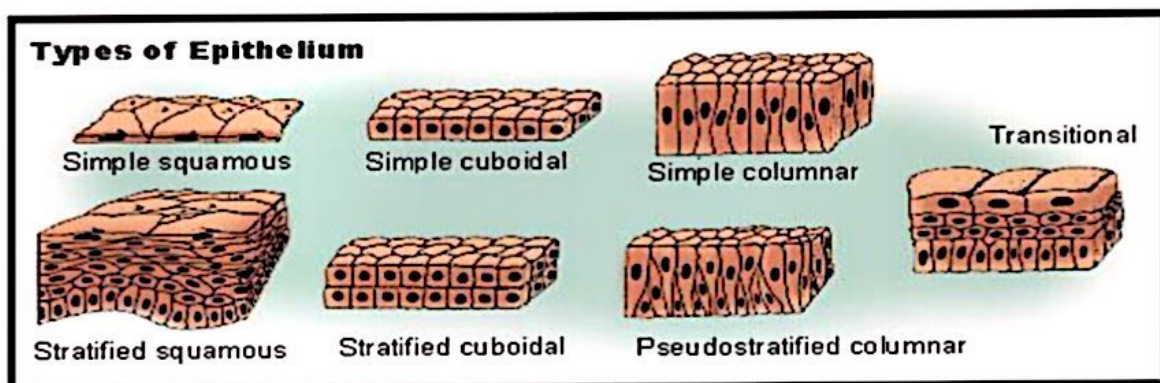
Epithelium is divided into two types:

a. Simple epithelium:

- 1) One cell layer thick
- 2) All cells rest on the basement membrane (basal surface) and all cells face the free surface.
- 3) Types of simple epithelium are: Squamous, Cuboidal, Columnar, Pseudo stratified.

b. Stratified epithelium:

- 1) More than one cell layer thick
- 2) Only the deepest layer of cells contacts the basement membrane and only the superficial-most cells have a free surface.
- 3) Types of stratified epithelium are: Squamous, Cuboidal, Columnar and Transitional.



Connective tissue

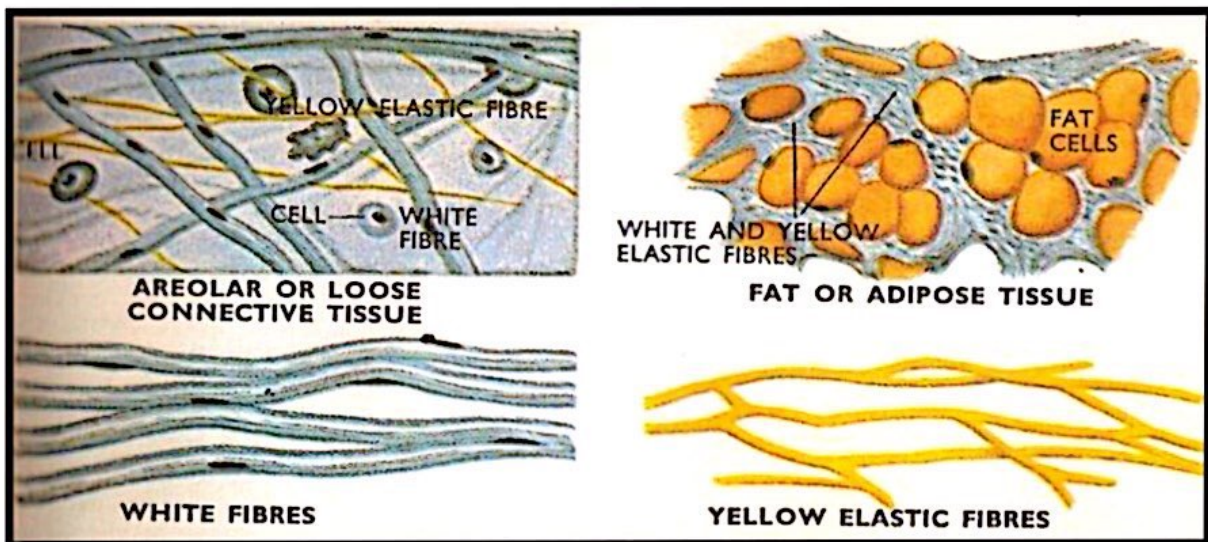
The connective tissue has an important function include **connecting, supporting** and **protection**.

Classification of connective tissue:

Proper connective tissue

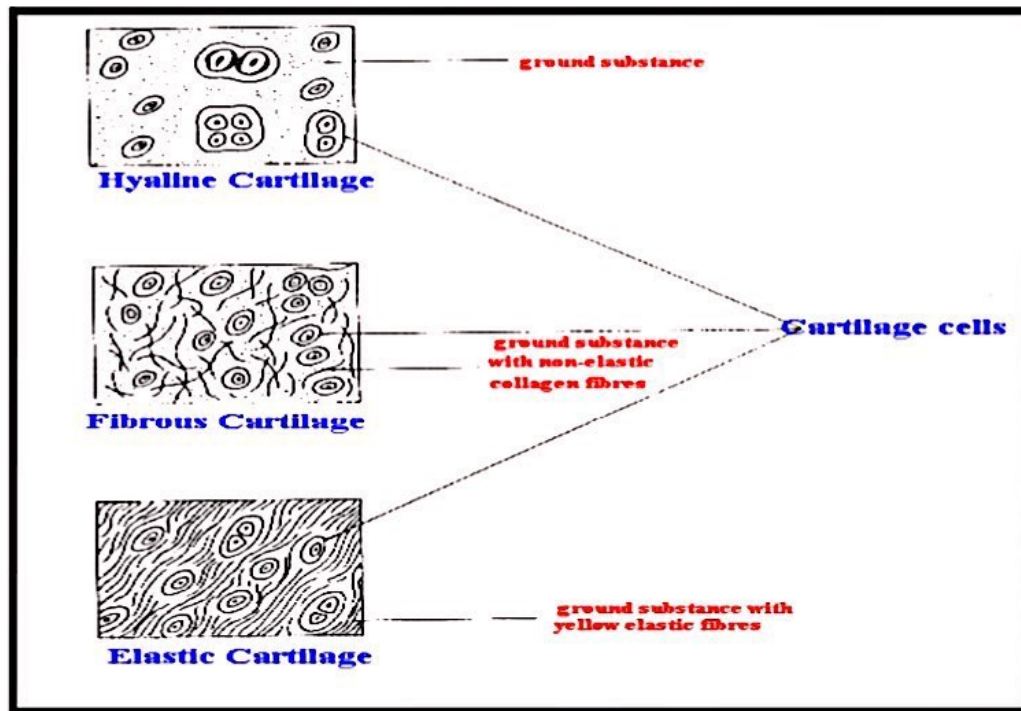
1-Loose connective tissue: areolar, reticular and adipose.

2-Dense connective tissue: regular and Irregular

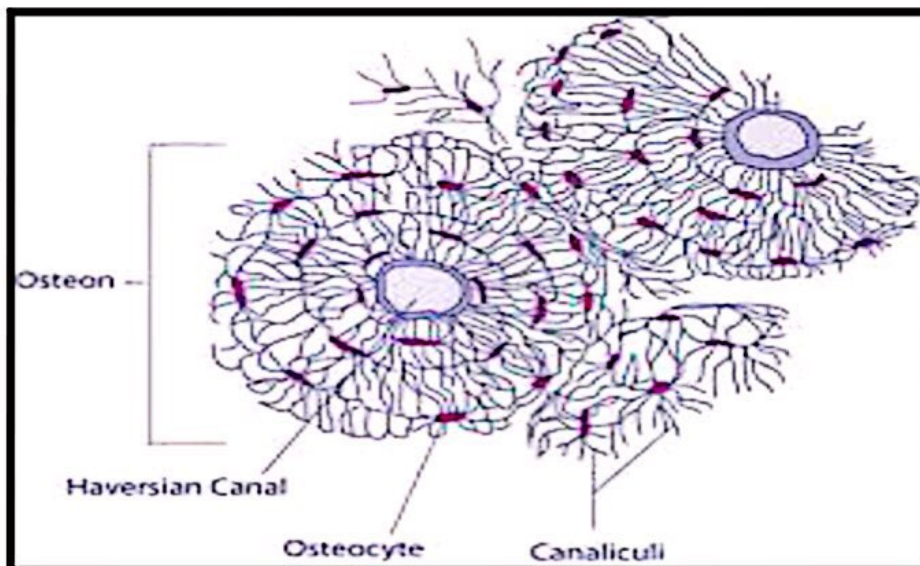


Special Connective tissue

1-Cartilage: There are three types of cartilage: hyaline, fibro and elastic.



2-Bone: There are two types of bone: compact and spongy



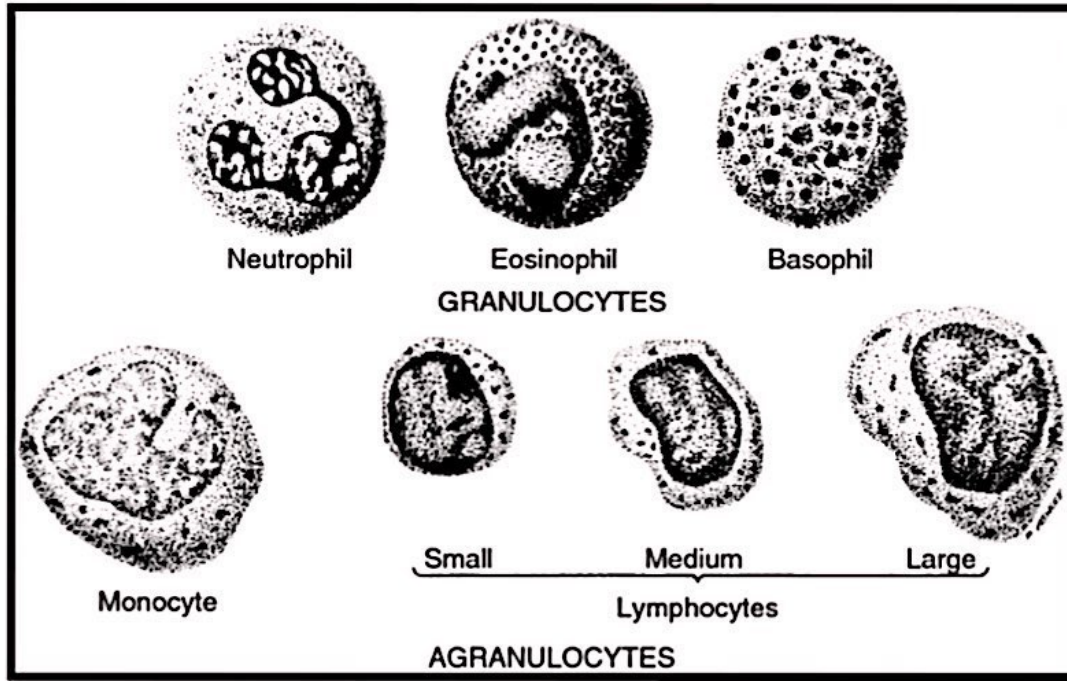
Leukocytes

1. Granular leukocytes.

Include: eosinophils, basophils & neutrophils

2. Agranular leukocytes.

Include: lymphocytes & monocytes



Platelets (thrombocytes): Are smallest of formed elements, lack nucleus

