Pathological Analysis Department

Title of the lecture: Collection blood

MSc. Zienab Mohsen Najem

ZienabMohsen@mustaqbal-college.edu.iq

Collection blood

Blood It is a liquid substance composed of red and white blood cells, plasma and platelets, a connective tissue, that is, a major tissue, and performs functions of great importance in the human body.

The human body consists of 8% of the blood relative to its mass.

Blood groups are divided into four main groups A, B,AB and O .

Blood functions

1- carry oxygen from the lungs and transfer it to tissues.

2- The carbon dioxide generated by the tissue returns to the lungs to induce exhalation.

3-Provides the body's cells with nutrients absorbed by the intestine to support them in the production of energy needed by the body to carry out activities.

4-The blood gives the body the immunity necessary to treat viruses and diseases through the production of white blood cells.

5- Blood preserves the water balance in the human body, keeping the water necessary for the body.

6-The blood maintains a balance of body temperature.

Blood components

Blood consists of two important parts:

Blood cells: form 45% of the total blood volume

Plasma: and make up 55% of the total volume of blood

First: Blood cells

1-White Blood Cells (WB.C)

2-Red Blood Cells (R.B.C)

3-Blood platelets

Second: plasma

This is the liquid part in which the blood cells swim. They are pale yellow and water form 90% of the total plasma size

The remaining 10% consists of the following:

-Blood proteins (albumin, globulin, thrombin and fibrinogen)

-Foods such as sugars, fats, vitamins, enzymes and hormones.

-Extractive materials such as urea, creatinine and uric acid.

-Inorganic substances such as potassium, calcium, sodium, iron, chlorine, magnesium and other elements.

Obtained blood specimen

1- Receiving and welcoming the patient and writing the patient's name, file number and required analyzes.

2- Place the hand of the patient in a comfortable place so that the face of the hand to the top.

3- Attach the tourniquet with enough strength until the vein is visible.

4- Locates the vein by looking and touching together.

5- Clean the vein area with the medical alcohol until dry.

6- Lower the needle tooth in the hand at a 45 degree angle and gently pull the syringe handle.

7- When the extraction process is completed, remove the tourniquet and remove needle tooth and place the cotton pieces in place and press it with the finger.

8- The blood is drawn into the syringe and placed in the tubes with patient data written on the tubes.

M.S.c. Zainab M. N.