BLOOD GROUPS

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Historical facts

- **Transfusion was tried to do in ancient Greece.**
- **At the beginning of the seventeenth century in Europe, they tried to transfuse blood to bloodless dogs of dead dogs or people.**
- **Not all attempts were successful, often people and dogs died.**

First blood transfusion

In 1667 in Paris for the first time a successful blood transfusion was carried out to a man from a lamb. Subsequent transfusions ended with the death of both

Blood transfusion from human to human

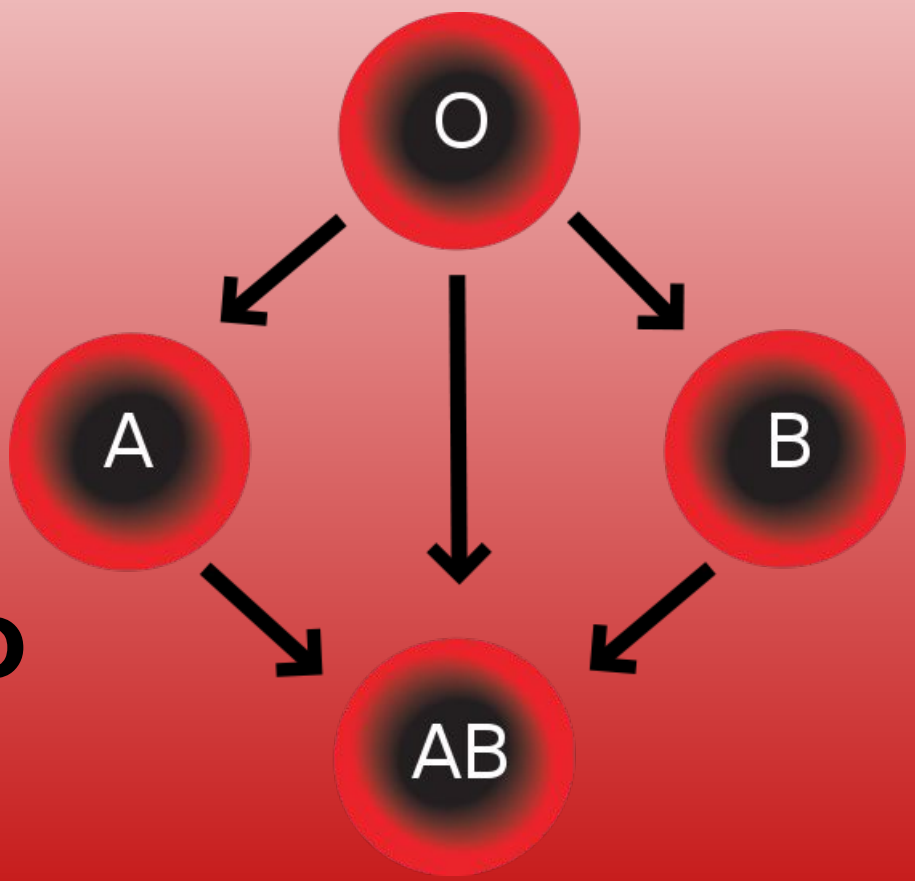
At the end of the 19th century, blood transfusions were first given to a pregnant woman from her husband.

The experiment was successful.

Human blood groups

In 1930, Austrian immunologist Karl Landsheiner, received the Nobel Prize, for the discovery

GROUPS OF BLOOD



Human blood groups

In 1900 Landsteiner took blood from himself and five colleagues, separated the serum from the red blood cells using a centrifuge, and mixed individual samples of red blood cells with the serum of different people. According to the presence or absence of agglutination, Landsteiner divided all the samples into three groups. In 1902 his students opened the fourth group.

Human blood groups

Erythrocytes (red blood cells) - post-cell blood structures.
Red blood cells are highly specialized cells whose function is to transport oxygen from the lungs to the tissues of the body.
In human erythrocytes, the nucleus is absent.

Human blood groups

On the surface of the lipoprotein membrane of the erythrocyte are specific antigens - agglutinogens.
In erytrocyte, two types of agglutinogens are found – A and B, and in plasma, two types of agglutinins– α и β. There are four blood types.

Human blood groups

 A antigen

 B antigen

0 (I) blood group

Human blood groups

A antigen

B antigen

A (II) blood group

Human blood groups

A antigen

B antigen

B (III) blood group

Human blood groups

A antigen

B antigen

AB (IV) blood group

Rh-factor

This is one of the blood proteins, it opened in 1940, Karl Landsteiner.

Named in honor of macaques - Rhesus, which was first discovered this type of protein.

If a person with Rh- is transfused with Rh + blood,

his antibodies will start to get rid of this blood, as if from a foreign body.

In pregnant women, this leads to the rejection of the fetus

Blood transfusion

Donor - person who donates blood for transfusion.

Blood transfusion

Recipient

-person who has been transferred the blood of another person.

Thank you for your attention