

Administration of transfusions

A transfusion is the giving of blood obtained from one person (donor) to another person (recipient).

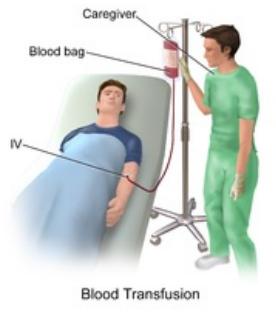
Donation prerequisites

- Age between 18-65 years, age over 60 is not recommended for the first collection (does not apply to autologous collections - blood for autotransfusion, and to the donation of hematopoietic cells for transplantation between blood relatives);
- weight over 50 kg;
- appropriate contact with the donor, consent of the donor.

Exclusion from donation

Permanent exclusions include

- Diabetes mellitus during insulin treatment,
- epilepsy ,
- bronchial asthma ,
- hypertension (systolic pressure ↑ 180 mmHg or diastolic pressure ↑ 110 mmHg),
- diseases of the heart and blood vessels (angina pectoris , irregularities in heart action , etc.),
- infectious diseases (viral hepatitis B , C , extrapulmonary TBC , syphilis , AIDS , HIV , etc.),
- intoxication, alcohol, drugs, risky sexual behavior,
- blood and blood diseases (bleeding conditions and more serious blood formation disorders),
- kidney disease (e.g. chronic glomerulonephritis , pyelonephritis),
- persons after stomach resection ,
- persons after transplantation ,
- prevention of blood transmission of the human form of BSE (individuals who stayed in Great Britain or France for more than half a year in the period from 1980-1996,
- individuals with a proven malaria disease ,
- malignant diseases.



Administering a transfusion to a patient

Temporary exclusions from donation

- allergies (pollen allergies, hay fever or asthma in the stage of disease manifestations),
- infectious diseases (TT above 38 degrees C – exclusion for 2 weeks after discontinuation of ATB and resolution of symptoms),
- infectious mononucleosis - 1 year after complete recovery,
- viral hepatitis A - 1 year after complete recovery,
- persons after acupuncture, tattooing and piercing (6 months to 1 year),
- pulmonary TB (exclusion for 2 years after recovery),
- vaccination with live vaccines (TB, rubella ,...) 4 weeks after the application of vaccination,
- vaccination – passive immunization (influenza , tick-borne encephalitis , tetanus ,...) 48 hours after application, if there are no complications,
- surgery (small surgical procedures – e.g. after tooth extraction), 1 week,
- major operations – 6 months,
- pregnancy – 9 months after childbirth and 1 month after the end of lactation,
- persons after transfusion – 1 year.

Blood groups

- Blood groups are organic substances found on the surface of cells, some even in blood serum;
- we divide into blood groups of erythrocytes , leukocytes , thrombocytes , as well as serum and enzyme;
- blood group characteristics are hereditary .

Occurrence of blood groups in the Czech lands

- The most common is group A (approx. 43%),
- further O (approx. 42%),
- followed by group B (approx. 11%),
- the lowest incidence is group AB (approx. 4%).

Autotransfusion

- It is a safe, relatively risk-free method of blood transfusion;
- it is performed in patients with planned extensive operations (the condition is that the patient is otherwise in a reasonable state of health);
- blood is taken from the patient in the pre-operative period (the amount of blood taken depends on the blood count and the patient's clinical condition);
- blood is preserved and prepared for retransfusion during surgery or in the first postoperative days;
- it is preferable to separate the plasma and freeze it to preserve the coagulation factors).

Advantages: exclusion of allergic, hemolytic and infectious complications.

Links

References

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External links

- OSACKÁ, Petronela. *Infúzioterapia a transfúzioterapia* [online]. Multimediálna podpora výučby klinických a zdravotníckych disciplín :: Portál Jesseniovej lekárskej fakulty Univerzity Komenského, ©5.2.2011. [cit. 2011-12-23]. <<https://portal.jfmed.uniba.sk/clanky.php?aid=141>>.