

Post-transfusion reaction

Post-transfusion side effects may occur during the administration of a blood transfusion . For this reason, before the actual blood transfusion takes place, a series of tests must be carried out, which would reverse any confusion, mistake or accident.

Distribution of transfusion according to severity

Mild post-transfusion reaction

It disappears after stopping the transfusion or simple treatment.

Moderate post-transfusion reaction

It will not disappear only after simple treatment, but at the same time it is not desirable to monitor vital functions.

Serious post-transfusion reaction

This reaction leads to malfunctions or, worse, to the failure of organ functions. It is necessary to monitor vital signs.

Types of post-transfusion reactions

Acute haemolytic reaction

Intravascular breakdown of erythrocytes occurs. It arises within 24 hours after the start of the transfusion.

Causes

- Immunological incompatibility between the blood of the donor and the recipient - most often when there is a mismatch of the ABO system.

Symptoms

- Fever,
- shivering,
- pain in the area of the venous access, lumbar area, abdomen or chest,
- hypotension,
- tachycardia,
- nausea or vomiting,
- shortness of breath and then going into shock.

Febrile nonhaemolytic reaction

It manifests itself within 30 minutes to 2 hours after the start of the transfusion.

Causes

- **Transfused residual leukocytes** - i.e. in people who have anti-leukocyte antibodies,
- **Transfused cytokines.**

Symptoms

- Fever,
- shivering,
- chills.

However, haemolysis, erythema or tachycardia do not occur.

Allergic reaction

It can happen immediately or later.

Causes

- **Plasma proteins** against which the patient has antibodies,
- an allergic reaction can also occur in patients who have anti-IgA antibodies.

Symptoms

- Urticaria,
- laryngospasm,
- state of shock.

Post-transfusion reactions from circulatory overload

This complication occurs most often in patients with primary cardiac failure, as an example we can cite CHD - he manifestation is then **acute cardiac failure**.

Symptoms

- A feeling of heaviness in the chest,
- cyanosis,
- dry cough.
- stuffiness,
- increased filling of the jugular veins and symptoms of pulmonary edema will be found during the examination.

First Aid

Whether a post-transfusion reaction is suspected or discovered, the first aid is **IMMEDIATE STOPPING THE TRANSFUSION**. We immediately inform the doctor and he proceeds according to his office, most often from the beginning in the monitoring of vital functions, then according to the severity of the post-transfusion reaction.

Links

Related Articles

- Blood transfusion
- Puerperium
- Blood groups

References

- PAŘÍZEK, . *Kritické stavy v porodnictví*. 1. vydání edition. Praha. 2012. 285 pp. ISBN 978-80-7262-949-7.