Standards and individual approaches in transfusion medicine in Russia

The Russian Transfusionist Association and National Progov Medical & Surgical Center on 12-14th of December 2018 held their 25th conference "Standards and individual approaches in clinical transfusion medicine," which was attended by over 200 specialists from Russia, Belarus, Ukraine, Tajikistan and the Netherlands.

Opening the conference, professor Eugene Zhibur invited the audience that in Russia 111 blood centers, 203 hospital blood banks and 12 plasma centers collected blood and blood components. The quantity of blood recipients has increased from 1,196,633 patients in 2016 to 1,209,725 (more than 0.8 % of the population) in 2017 year.

From January 1, 2019, a new version of the law on blood donation came into force and the technical regulation is replaced by the Rules for the collection, storage, transportation and clinical use of donated blood and its components. NAT for HIV, HBV and HGV will carry for all seronegative blood samples of donors. Due to this, the quarantine period of donor plasma is reduced to 120 days. Donors are examined for HIV, viral hepatitis B and C, syphilis. In 2013, due to the presence of markers of these infections, 28,533 people were rejected (13.8% of all these infections in the country). By 2017, these figures dropped to 15,910 people and 8.0%, respectively. Obvious problems include attracting healthy people to donate, and the specificity of diagnostic studies.

Professor Mikhail Zamyatin spoke about emergency care for patients who have been taking anticoagulants for a long time. If surgery is necessary in such patients, the doctor will have to choose: a) to postpone the operation; b) neutralize the anticoagulant; c) operate under hypocoagulation conditions. In order to reduce the risk of iatrogenic, in the hospital it is necessary to create a local protocol for the management of such patients, based on knowledge of the characteristics of anticoagulants, taking into account the diagnostic, therapeutic and economic possibilities of the organization. In accordance with this protocol, a supply of drugs and blood components needed to assist patients receiving anticoagulants should be created in the hospital, and a person responsible for recording, storing and making an application (but not for use) should be assigned. Stock should be available around the clock. The staff on duty should be aware of the presence in the hospital of the products for the correction of the hemostasis system, be able to use them and have the right to do so.

Martin Smid, as a key foreign speaker, told that there are no papers in the Netherlands haemovigilance system - hospitals fill out notification of reactions in electronic form on tripnet.nl. The transfusion reactions also include newly identified irregular antibodies to red blood cells (in 2016, 637 patients in 63 hospitals, no severe reaction). The Sanquin collect blood in 51 stationary and 85 mobile donor centers, prepare components in 2 locations, all diagnostics are performed in one laboratory. There are 7 distribution centers of blood components for about a hundred hospitals. The immunohematological laboratory of Sanquin also examines all pregnant women in the country. 96% of platelet concentrates in the country are prepared from pooled buffy-coats and another 4% of platelet concentrates are prepared by apheresis from histotyped donors for HLA or HPA-allotransplanted patients. All platelets are screened for bacterial contamination. This is an excellent example of national blood service centralization. Studying this experience, it should be borne in mind that the area of Russia is 400 times larger than the area of the Netherlands, and the population density is 50 times less. Therefore, pathogen inactivation in the blood bank seems to us preferable to the centralized laboratory of bacterial control.

The next conference in Moscow will be held on December 12, 2019. All colleagues are welcome.