15th conference “standards and individual approaches in clinical transfusion”

The 15th conference on “Standards and individual approaches in clinical transfusion” was held in the Pirogov Russian National Medical and Surgical centre. The conference was well attended with 170 participants from Russia, Kazakhstan, Ukraine and the UK.

Professor Eugene Zhriburt opening the conference remarked on the adoption of the new Russian law on blood donation and the federal and regional regulations regulating food payment to blood and plasma donors.

Karen Osilov shared her experience of transfusing methylene blue pathogen-inactivated plasma for infants undergoing cardiac surgery. Pathogen inactivation allows the use of the same donor plasma and red blood cells to reduce systemic inflammation in patients undergoing cardiac surgery, as well as reduce the risk of transfusion reactions. The reduction of systemic inflammatory response reduces morbidity and mortality, as well as the length of stay in the ICU and in the hospital.

Andrei Konovalov reported on the rate of seronegative NAT-positive blood donors in Saratov as follows:
- Hepatitis C virus - 1:15000;
- Hepatitis B virus - 1:40000;
- HIV-1 - 1 from 149,620 tested samples.
The challenge remains the introduction of a national standard sensitivity test for NAT- infections in blood donors.

Dana Pavlova spoke on providing immunological compatible pediatric transfusions. The combination of modern technologies (leukodepletion, RBC phenotyping and individual donor selection, registry of homozygous Rh system donors, split adult doses of plasma and red blood cells) has led not only to an increase in therapeutic efficacy, but also to a reduction of 65% in red cell transfusions in the hospital and 47% per patient transfused.

Angus Douglas (DGP) showed the Scottish project “Better blood transfusion” results:
- Improved haemovigilance;
- SHOT reports doubled;
- Wrong blood to patient reduced from 10 units per million transfused in 2002 to 3 units per million transfused in 2012;
- Improved incident Management:
- 100% reported within 5 days;
- 100% investigated and resolved within 1 month;
- Trends reviewed and action taken at Project Board (Hospital/Blood Service) - meets 3 times/year.

He shared the Scottish experience of IT support provided to obtain comparable data on blood transfusions from each hospital and physician. Training materials were developed for nurses and hospital doctors - 78000 people were trained (75%). As a result, for 10 years the number of red blood cell transfusion per 1000 population declined from 47 to 34. Since 2003 they have saved 105,000 litres of blood through reduced use.

According to Teresa Allen (NHSBT) even after three “Better blood transfusion” programs evidence suggests there is still 20% RBCs inappropriate use. British colleagues needed targeted initiatives around Platelets as demand was escalating (8% increase in 2011).
The key areas of focus for red cells:
- detect & treat preoperative anaemia;
- minimise blood loss & bleeding intra-operatively;
- optimise tolerance of anaemia post operatively;
- continuous cycle: audit>corrective action>audit.

The 16th conference on “New in Transfusion Medicine: Regulations and Technology” will be held in the Pirogov Centre on May 14 - 16, 2014. All colleagues are welcome.