

Seminar on

# “News in Blood Transfusion: Guidelines and Technologies”



From left to right Zhandos Burkitbaev from Kazakhstan, Eleonora Dashkevich from Belarus, Anatoly Chugriev from Ukraine and Eugene Zhiburt from Russia

**On May 15-17, 2012 the Russian Pirogov National Medical and Surgical Centre held a seminar on “News in Blood Transfusion: Guidelines and Technologies”. The seminar was well attended with over 100 representatives from Belarus, Kazakhstan, Russia and Ukraine.**

During the seminar Sergei Madzaev reported that the Russian Association of Transfusion conducted a national survey on the protection of a donors’ needle as this topic is a relatively new practice in the method of working.

This new practice ensures:

- The safe removal of the needle from the vein
- The fixation of the needle inside the protector
- The prevention of injuries and risk of infection of both medical personnel as well as the donors
- Colleagues have formulated suggestions for improving the design of the secuvam.

Also one of the most experienced Russian immunohematologists Alexei Skuditsky focused his talk on the outstanding issues in their field. He formulated conditions that are necessary for the indication of the clinical significance of alloantibodies:

1. The presence of red blood cell antigens corresponding to the antibodies
2. The ideal temperature for the indication of the activity of antibodies
3. Alloantibodies’ activity
4. Types of immunoglobulines
5. Secretor phenomenon

A national register of post-transfusion reactions, with access to all transfusion departments in Belarus is created according to Eleonora Dashkevich’s report.

The report Zhandos Burkitbayev wrote gave a very good impression of the achievements of the blood service in Kazakhstan. Over the past few years new blood centres have been constructed in 10 out of 15 regions in the country.

In 2011, Kazakhstan held pathogen-inactivated 11% of plasma and 33% of platelets. 55% of red blood cells and 82% of platelets were leukodepleted. To safeguard national blood products, Kazakhs colleagues are selecting partners on contracting plasma fractionation abroad. With a market volume of blood Kazakhstan U.S. \$ 60 million, a plasma fractionation contract is expected to save at least 25% of public expenditure. An unexpected highlight of the seminar was a report of Sergey Binyukov on blood transfusion among dogs. Interest in this technology in the veterinary world is growing.

The safety of human blood is becoming increasingly relevant as mutant forms of hepatitis B appear more and more in patients due to a persons’ reduced level of the immune system or medical treatments. A study about the reactivity of test systems with mutant forms of hepatitis B is key to establish the correct algorithm for hepatitis B testing. Irina Golubeva results presented a comparative study of the Paul Ehrlich Institute based in Germany.

Among 22 test systems for screening of HBsAg maximum sensitivity has been registered in Russian diagnostic kit DS-EIA-HBsAg-0,01/. An ICU transfusion for adults and children should be provided with the haemoglobin concentration of 7 g / dl or less.

It is advisable to refrain from transfusions in patients after surgery in the absence of symptoms of anaemia and reduction of haemoglobin less than 8 g / dl, even in elderly patients with cardiovascular disease or risk factors. Accordingly, the introduction of modern blood transfusion rules should lead to a reduction in the proportion of recipients of blood in the hospital.

The next workshop is on “Standards and individual approaches in clinical transfusion” in conjunction with colleagues from the UK Blood Service on December 12-14, 2012.