Македонско Здружение за критично болни пациенти, Македонско здружение за аnestезиологија, Македонско здружение за трансфузиона медицина под патронат на НАТА

Iва МАКЕДОНСКА КОНФЕРЕНЦИЈА ЗА АЛТЕРНАТИВИ ВО ТРАНСФУЗИЈАТА КАЈ КРИТИЧНО БОЛНИ ПАЦИЕНТИ

Best Western Хотел Bellevue, 16 и 17 Ноември, Скопје

КУСИ ИЗВАДОЦИ ОД ПРЕДАВАЊАТА
The theme for adequate and precise peri-operative blood use is becoming more and more actual in the aspect of the increasing number of operative procedures, the limited resources of blood and blood products and the growing threat of transmissible infections.

Together with the sophistication of pure surgical methods, a broad spectrum of other techniques are applied in the peri-operative period during anaesthesia/surgery as in the intensive care units. These techniques are characterized with their accessibility and relatively low cost of technical devices and materials. For the correct application of most of them a perfect organization and precise collaboration between the responsible surgical and anaesthesia/intensive care teams is needed.

Most of these methods are applied for long time and are well known-acute normovolemic hemodilution, infusion therapy, controlled hypotension, others became important with the development of modern devices and methods for sparing of blood and blood products-autohemotransfusion and intra-operative reinfusion.

Here we shall present the preliminary results of a pilot study including 20 female patients subjected to radical hysterectomy. The main aim is to combine the most effective methods and techniques in a most adequate peri-operative anaesthesia and intensive care management protocol for that category of patients.

RATIONAL USE OF BLOOD AND BLOOD PRODUCTS IN CARDIO SURGERY

Zan Mitrev, T. Anguseva, E Ambarkova

Special Hospital for cardiosurgery Fillip II, Skopje, R of Macedonia

Background: Cardiac surgery is associated with a high rate of blood transfusion. The rationale for red blood cell (RBC) transfusion is based on the observation that anemia is an independent risk factor for illness and death after cardiac operations. However, transfusions have been associated with high rates of these poor outcomes in
critically ill patients, and some recent studies have shown worse outcomes compared with nontransfused patients after cardiac surgery.

**Material and methods:** between March 2000 and October 2012 11742 adult patients had been operated in special hospital for cardiac surgery. 3190 patients who underwent cardiac surgery with cardiopulmonary bypass during last three years had been included in this study. Patients were randomly assigned to a liberal strategy of blood transfusion (to maintain a hematocrit [the volume percentage of red blood cells in whole blood] of 30 percent or greater). The overall average hematocrit values in the ICU were 31.8 percent.

**Results:** A total of 2488 of 3190 patients (78 percent) received a blood transfusion. The researchers found that the primary composite outcome measured at 30 days-death from any cause, cardiogenic shock, acute respiratory distress syndrome, or acute renal injury requiring dialysis or hemofiltration during the hospital stay-occurred in 10 percent of patients. Independent of transfusion strategy, the number of transfused red blood cell units was an independent risk factor for clinical complications or death at 30 days. Average usage was 1,5 blood per pts, 0,7plasma per pts, 0,1 trombocyte units per pts. All pts who were with antiagregant therapy got ciklokapron before connecting on heart lung machine.

There were no significant differences in the occurrence of cardiac, respiratory, neurologic, or infectious complications, or severe bleeding requiring reoperation. There were also no differences in lengths of ICU or hospital stay.

**Conclusion:** The authors suggest that the rationale for implementing a restrictive transfusion strategy is based on many studies that have shown a lack of benefit and, at the same time, substantially increased costs and adverse effects associated with RBC transfusion, including transmission of viral and bacterial diseases and transfusion-related acute lung injury.

**TRANSFUSION SUPPORT IN HEMATOPOIETIC STEM CELL TRANSPLANTATION**

Tatjana Makarovska-Bojadzieva, Milenka Blagoevska
Institute of Transfusion Medicine, Skopje, Macedonia

**Резиме**

Алогената трансплантация на матични клетки (ТМК) е успешен начин за лекување на пациен-тите со малцински хематолошки заблудувања. Тековните стандардни протоколи вклучуваат максимални дози на системска хеморадијација истовремено за ерадикација на канцерот и за имул-нолошка супресија на домакинот. За време на панцитопенијниот период, практично секој транс-плантирани пациент има потреба од интензивна трансфузисолошка поддршка.

Кондиционирачкиот протокол, т.е. видот на миелоаблативната терапија како и АВО компати-билноста помеѓу дарителот и примателот во голема мерка влијаат на потребите од трансфу-зија (количина и вид на крвни компоненти).

АВО инкомпатабилната може да биде мајорна, минорна, и двојна, во зависност од присуство-то на изохемаглутинини кај примателот усмерени против антигените на еритроцитите од дарителот. Околу 20 до 25% од ТМК се со мајорна или минорна инкомпатабилност, додека 5% се со двојна АВО инкомпатабилби. Секоја од нив се карактеризира со специфични имунокем-матолошски наоди и потенцијални несакани ефекти како што е акутна хемолитичка реакци-ја, одложено прифаќање на графтон и пост-трансплантационо еритроцитна аплазија што при-