

PATHOPHYSIOLOGICAL SUBSTANTIATION OF DONATIONS SAFETY BASED ON DONORS' CLINICAL, LABORATORY, MORPHOLOGIC, BIOCHEMICAL AND BIOPHYSICAL BLOOD TEST RESULTS

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INTRODUCTION

Blood transfusion service and its social component – donorship must be the priority areas of the state policy because the results of its work are of paramount importance. The main task of the blood transfusion service is supply of high quality components for blood transfusion therapy. Quality of blood components is compliance of properties and specifications of the blood component supplied to the recipient with the set standards. Strict order of conformance with the approved regulations and procedures is important at all technological states and is a cornerstone of blood transfusion service products quality. All actions, planned and implemented, starting with planning donorship and ending with the finished product manufacturing and storage conditions, are important for ensuring the quality as the final result¹. In spite of the lately increasing number of scientific research programs on donor blood storage, integrated solution of this problem remains a challenging open issue. We studied parameters indicative of iron metabolism in donors, and glycolytic processes in peripheral blood erythrocytes depending on history of donations, donors' health at the time of plasma donation via automatic plasmapheresis, issues of donorship optimization, and its medical and social aspects². Potential donors reserve decrease negatively affects the volumes of donor blood collected by the blood transfusion service of Ukraine³. Reducing number of donors in contrast to the increasing need for blood components and products is a topical issue of present-day transfusion medicine because the number of donors is decreasing by 10–15% annually worldwide. Exceedance of regulated number of annual donations and absence of strict

¹ Ботос Л. Донорство: залучення донорів крові та її компонентів : навчальний посібник. Київ – Вашингтон : Б.в., 2014. 200 с.

² Видиборець С.В. Донорство крові та метаболізм заліза: монографія. Вінниця-Бориспіль : ТОВ «Меркьюрі-Поділля», 2012. 144 с.

³ Видиборець С.В. Організація трансфузіологічної допомоги в закладах охорони здоров'я: керівництво для лікарів. Київ – Вашингтон : Б.в., 2018. 224 с.