

группа) с ожогами IIIa степени, общей площадью ожога 1750 см<sup>2</sup>. У всех пациентов имели место ожоги IIIa степени стопы и голеностопного сустава от 2 до 6% поверхности тела. Группа сравнения (II группа) состоящая из 30 больных, которых лечили традиционным методом, была сопоставима с опытной по полу, возрасту, степени и площади ожога.

Для определения эффективности использования амниотической оболочки проводили морфологические и биохимические исследования крови у больных обеих групп.

Установлено, что применение амниотической оболочки предупреждало снижение количества эритроцитов (на 25-30%), гемоглобина (на 40%), гематокритной величины (на 35%) и общего белка (45%).

Несмотря на субъективный характер оценки при использовании амниотической оболочки, больные чаще отмечали обезболивающий эффект и уменьшение количества раневого отделяемого. Как только амниотическая оболочка прирастала к ране, поверхность её ежедневно очищали, при этом на рану не накладывали какие-либо другие повязки.

Заживление ожоговых ран IIIa степени при использовании амниотической оболочки проходило быстрее на 6-7 дней (среднее значение 18,4±3,5 дня) по сравнению с группой сравнения (среднее значение 25,6±6,5 дня). Кроме того, амниотическая оболочка позволила сократить частоту гнойных осложнений ожоговых ран более чем в 2 раза.

Следовательно, амниотическая оболочка является временным физиологическим материалом, применяемым у больных с обширными ожогами IIIa степени, полностью оправдывает себя как временное покрытие ожоговых ран и может также заготавливаться и храниться для лечения пострадавших.

## THE INTRODUCTION OF MODERN TECHNOLOGIES FOR EXPLANTATION OF ORGANS FROM DONORS EFFECTIVE IN THE MOSCOW REGION

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The rapid development and implementation of various medical technologies in a variety of specialty medicine is a feature of transplants organs, tissues and cells. Despite the continuous upgrading of technology, particularly in the explantation of organs, tissues and cells, to improve the protocols and the introduction of donor conditioning, as well as the appearance of surgical teams in

the arsenal of portable machine perfusion is still not a criterion for the efficiency of the donor process.

In transplants community in the world, the most discussed problem of concomitant explantation of organs from non – heartbeating donors remains relatively high proportion of renal transplant with delayed function. Analysis of the literature data the proportion of renal transplant ranged from 48 to 78,4% with delayed function (Magliocca J.F., et al., 2005). In Russia the problem is urgent, as more than 50% of the pool of effective non – heartbeating donors from the general of effective donors. According to the literature worldwide, explantation of the kidneys from non – heartbeating donors accompanied by the application of various techniques aimed at reducing the frequency of delayed graft function. Namely, the use of perfusion *in situ* by means of DBTL catheter, the use of perfusion machines in the before transplantation time, extracorporeal perfusion and oxygenation in hypothermia and in normothermia. Based on the already known and systematic foreign experience in the explantation of organs from non – heartbeating donors used techniques are introduced and are widely used in Russia. In the search for the best results in reducing the incidence of delayed graft function of kidney result was obtained when using the technology of extracorporeal membrane oxygenation (ECMO) with normothermia as evidenced by the majority of foreign publications and the international community transplants. This tone is repeated in national publications, as evidenced by the reports of the technology embedded in the Sklifasovsky Research Institute of Emergency Medicine (Moscow Department of Health), at the Russian Research Center of Surgery named by B. Petrovsky, the Moscow Coordinating Center of Organ Donation (Moscow Department of Health), (Minina M.G. et al., 2012). Obtaining preliminary data on the use of this technology in the explantation of organs for transplantation, evidence of the effectiveness of this technique. In addition, ECMO technology enables multiorgan explantation.

First, using ECMO technology, employees, Department of Surgery Organ donation M.F. Vladimirsky Moscow regional clinical research institute together with staff offices coordinate organ donation Academician V.I. Shumakov Federal Research Center of Transplantology and Artificial Organs, in the Moscow region produced multiorgan removal of organs.

ECMO technology is the modern way to restore and maintain the viability of organs from donors with a sudden irreversible circulatory arrest (uncontrolled non – heartbeating donors) before explantation surgery. Further development, implementation and active use will undoubtedly be to increase effective donors by organizing and conducting system of measures aimed at improving and using new technologies in health care facilities in the Moscow region.

## ИНФЕКЦИИ