

**МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»**



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ортоградної чистки товстої кишки, дієтичного та медикаментозного супроводу за запропонованим алгоритмом.

СЕКЦІЯ 15 АКТУАЛЬНІ ПИТАННЯ, АНЕСТЕЗІОЛОГІЇ ТА ІНТЕНСИВНОЇ ТЕРАПІЇ

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DETOXIFICATION RESOURCES OF KIDNEYS IN SEPSIS

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Introduction. Microorganisms and products of their vital activity, bacterial endo- and exotoxins, intermediary and terminal products of the metabolism (in excessive concentrations), components of the cellular, tissue, organic and integration regulatory systems (in pathologically high concentrations), products of the distorted metabolism, toxic substances of the intestinal origin are generally referred to the factors of endogenous intoxication. Molecules of the average mass (MAM), which have sufficiently high biological activity, are also referred to composition of toxic substances. In particular, they have neurotoxic, cardiotoxic, hepatotoxic, nephrotoxic activity, induce secondary immunosuppression,

The aim of the study. Analysis of modification of the parameter test and the kinetic parameters of the MAM indicates the detoxification possibilities of kidneys to implement an infusion program of intensive care in sepsis.

Material and methods. Investigations are referred to open, randomized, prospective and control. Criteria of inclusion, exclusion and inhibition are included into investigation design. Patients with purulent-septic complications with manifestation of severe endotoxemia, dopaminergic and other TC signs and generalized lesions presence were included into inclusion criteria. Patients, who were on the programmed hemodialysis, ALV, with contraindications to “volume loading” from the side of respiratory and cardiovascular systems, reaction absence on loop diuretics were included into exclusion criteria. The obtained results of investigation were processed by means of variation statistics method according to Fisher (Student’s criterion) using IBM PC (EXCEL program). Calculation modifications of the parameter test and kinetic parameters of MAM were selected by the method of objective endotoxemia.

Results. Infusoria *Paramecium caudatum* combine in themselves the signs of both separate cell and the whole mechanism. They may be considered as simple receptor-effector systems that react to the components of endotoxemia with a complex of physiological and biochemical changes. In the blood plasma, the components of endotoxemia are also molecules with a high molecular weight ($ae > 36 \text{ \AA}$, $MM > 50,000-70,000 \text{ D}$), which, in practice, do not pass through the glomerular filter, and those, which are freely filtered ($ae < 24 \text{ \AA}$, $MM < 30,000 \text{ D}$). Passingly, molecules with approximately the same masses pass through the glomerular filter in different ways. It depends upon configuration, division of charges, hydration, the degree of mechanical attachment and the nature of the membranes’ damage. The severity of endotoxemia in sepsis is represented by the figures of plasma toxicity index and concurs with the authors’ opinion, who used other methods. Analysis of the change in values of the toxicity index is evidence that it is functionally oriented to the index of toxic substances’ (TS) concentration in the blood plasma. The nature of the TS elimination by kidneys is more informative index for clinical practice. Consideration of its values under different conditions of the research demonstrates that different loadings contribute to TS elimination by kidneys. Clearance index - the degree of virtual plasma volume (volume of extracellular fluid) to be completely cleared from the components of endotoxemia per one hour takes an important place in these investigations.

Conclusions. Thus, the analysis of modification of the parameter test and the kinetic parameters of the MAM indicates the detoxification possibilities of kidneys to implement an infusion program of intensive care in sepsis.