

thoracoscopic correction in the CIS in 2008. The thoracoscopic surgical correction of esophageal atresia makes it possible to restore the integrity of the esophagus with less operative trauma compared to that in thoracotomy. An important advantage of the thoracoscopy is the excellent visualization of the mediastinal structures, allowing to raise the end of the esophagus carefully without damaging the smaller branches of the vagus nerve, which is important for the function of the distal esophagus in the postoperative period.

After analyzing the birth defects, we found that they are severe and socially significant anomalies that inevitably lead to death if not diagnosed and the child is not operated. The efficiency of the reconstructive surgery depends on early diagnosis of diseases and associated abnormalities, adequate preoperative preparation and timely transport of the baby to surgical hospital. Further upgrading of endoscopic techniques and thoracoscopic surgery will improve the results of surgical treatment of EA with TEF.

## DEVELOPMENT ENDOGENOUS INTOXICATION IN THERMAL SKIN BURNS

*Bulko I.V.*

*National Pirogov Memorial Medical University, Department of Human Anatomy, Vinnytsya, Ukraine*

One of the pathogenetic links of diseased organs and systems for burns is the development of endogenous intoxication and inflammatory reaction. In response to local thermal cell damage a significant number of mediators of inflammation, proinflammatory cytokines, which are able to activate the development of systemic inflammatory response, are synthesized. Endogenous intoxication is resulting from a significant increase in the number of peptides in the blood of average molecular weight, which exhibit systemic cytotoxic properties.

The degree of accumulation of toxic products in the body was evaluated by "toxic" blood serum of experimental animals, examining the concentration of molecules of average weight (AMW) for screening by NI Gabrielyan et al. [Habryalyan, 1983]. Also, leukocytic intoxication index (LII) was determined by the method Ya.Ya. Calle Kalyfa.

In our studies the level of the average molecular weight and leukocyte index of intoxication in rats with burns, which injected solutions Lactoproteinum with sorbitol or HAES-LX-5%, in the remote period of burn injuries reached its peak after 14 days, minimum - 30 days after thermal lesions. After 14 days (late stage of toxemia) leukocyte index was statistically significantly higher (3.2 times) in rats with skin burns, injected 0.9% solution of NaCl, compared to rats without heat injury. After 21 days (stage of septic toxemia) LII remained statistically significantly higher (2.2 times). After 30 days LII had no statistically significant

difference between animals with and without burn care. Test solution HAES-LX 5% helped reduce leukocyte index of intoxication ( $p < 0.05$ ) animals with burn injury 14 days 1.6 times in 21 days - 1.7 times and 30 day - was not statistically significant difference.

Investigation of the average molecular weight has established that the level of endogenous intoxication statistically significantly lower in rats without thermal injury skin than in rats with burn throughout the observation period ( $p < 0,05-0,001$ ) and statistically significantly higher ( $p < 0.05$ ) rats with thermal injury skin, injected 0.9% solution of NaCl, compared to animals undergoing infusion solutions Lactoproteinum with sorbitol or HAES-LX-5%.

The accumulation of average molecular weight associated with the lack of activity of peptidases which carry blood degradation peptides normally. Thus, experimental skin burn injury is characteristic of endogenous intoxication, which is adjusted and normalized combined infusion of hyperosmolar solutions.

The manifestations of the biological activity of average weight peptides are quite numerous. They have vascular, cardiovascular, neuro and immunosuppressive properties, exert inhibitory effects on metabolism, mitochondrial respiration, DNA synthesis in hepatocytes, synthesis and utilization of glucose, hemoglobin synthesis, activity of some enzymes. In animal blood with burn injury identified a new factor (or group of factors) from the group of peptides that actively affect the function of the blood-brain barrier, microvascular tone and microcirculation. There are several studies that indicate the average weight molecules interact with cell membranes. Among the average molecular weight is allocated a number of compounds that have properties of bioregulators, reducing the resting potential of the cell and the electrical resistance of the cell membrane.

The observed correlative relationship between the concentration indices AMW, LII and composition and performance of lymphocytic white pulp of the spleen of rats in the later stages of burn disease in terms of the use of infusion therapy NaCl, Lactoproteinum with sorbitol and HAES-LX-5%.

Our research of toxicity serum of animals with thermal injury suggests that in the later stages of burn injuries - stage toxemia and septic toxemia (14 21 days) found a high concentration of middle mass molecules that require medication adjustments. Application HAES-LX-5% at a dose of 10 ml / kg revealed the existence of significant drug detoxification properties.