



serum and in tissue homogenates, the degree of dysbiosis was calculated according to Levitsky. The activity of elastase, catalase, and MDA content also were determined in the homogenates of the kidneys. PAI was calculated by MDA and catalase activity ratio. The results of the experiments were subjected to standard statistical processing according to the recommendations given in the literature devoted to the question. According to the results, the level of urease increases in the liver of rats with experimental dysbiosis 2.3 times, in the gastric mucosa 2 times and in the serum 2.3 times, which indicates a significant increase in bacterial contamination of these tissues. The lysozyme activity in these tissues, in contrast, is reduced in rats with dysbiosis: in the liver by 42%, in the stomach by 36% and in serum by 32%, which indicates a significant decrease of nonspecific immunity level. The dysbiosis degree in the liver of rats increases 4 times, in the stomach 3.1 times and in the serum 3.9 times. The obtained data indicate the development of generalized dysbiosis or dysbiotic syndrome. The phytogel "Quertulin" oral application to a certain extent normalizes the urease, lysozyme level. However, the degree of dysbiosis is significantly reduced, it doesn't return to the control level. This may be due to insufficient treatment (only 3 days). After lincomycin and adrenaline injection, in rats urease activity increases by 76%, lysozyme activity decreases by 33%, which increases the degree of dysbiosis by 2.6 times. The phytogel "Quertulin" oral applications reduce the urease activity by 20% ($p>0,3$), increase lysozyme activity by 18,5% ($p>0,05$) and reduce the degree of dysbiosis by 33% ($p>0,05$). Dysbiotic process in kidneys develops less than in other organs, possibly due to high activity level of the antimicrobial enzyme lysozyme, level of which in kidneys is higher than in all other organs and tissues. As a result of dysbiosis, level of biochemical inflammation markers increases significantly in kidneys: elastase by 79.5% and MDA by 18%. In rats with dysbiosis, both catalase activity and PAI index were significantly reduced by 6% and by 21% respectively. In conclusion, according to obtained data, it can be stated, that on the condition of experimental dysbiotic syndrome in kidneys an inflammatory-dystrophic process develops, the level of which can be significantly reduced by oral application of the antidybiotic gel "Quertulin".

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NON-SPECIFIC HOST RESISTANCE IN ACUTE TRAUMA

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Trauma is one of the leading causes of morbidity and hospital mortality. The term "traumatic illness" (TI), as widely accepted, means a complex phased pathological process that develops in various traumatic injuries. Pathogenesis of this disease includes violations of homeostasis, general and local adaptation processes, and clinical manifestations depending on the nature, number and location of injuries, etc.

To find out changes in the humoral immune system of victims with injuries of the musculoskeletal system of varying severity.

The study involved 52 patients with traumatic illness, aged 18-69 years (37.91 ± 4.28). The control group consisted of 16 patients who underwent planned surgical interventions not related to pathology of the musculoskeletal system (uncomplicated inguinal herniotomy, venectomy, etc.). Among the contingent of respondents, there were 32 (61.5%) male patients, and 20 (38.5%) female patients. Analysis of non-specific host resistance parameters was performed by determining 0-lymphocytes, natural killers (CD16+), phagocytic activity (FA) and phagocytic number / index (FI), NST and stimulated NST tests, natural antibody titer, complement activity, and a number of integrated indicators.

The obtained data indicate the presence of various disorders of non-specific resistance on all indicators except the stimulated phagocytosis index. The most probable deviations compared to the control were observed in the relative number of 0-lymphocytes (positive variation 39.78%, IInd degree of immune disorders), phagocytic activity (negative deviation -14.05%, Ist degree of immune disorders), stimulated NST test (negative deviation -11.73%, Ist degree of immune



disorders) and potential reserve of bactericidal activity of phagocytes (negative variation -11.83%, 1st degree of immune disorders). Other changes were unlikely, though significant.

Despite the fact that surgery, even without trauma, significantly affects non-specific resistance and the immune response, in patients with TI detected disorders were significantly more prominent than in patients of the comparison control group.

In all patients with TI there are violations of non-specific resistance of the organism, mainly due to the increase in the relative number of 0-lymphocytes and decreased phagocytic activity, the rate of stimulated NST test, and suppression of the potential reserve of bactericidal activity of phagocytic cells.

Tulyulyuk S.V.

EXPERIENCE OF BLOCKING METAL-POLYMERIC INTRAMEDULLARY OSTEOSYNTHESIS TREATMENT OF FRACTURES OF LONG BONES

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The Department of Traumatology, Orthopaedics and Neurosurgery of Bukovinian State Medical University, Professor Rublenyk I.M., his students and co-workers, since 1978, have been conducting an intense and inventive scientific work on the development of technologies blocking intramedullary metal-polymeric osteosynthesis (BIMPO). Technology BIMPO designed for surgical treatment of femur, tibia and humerus bones, constitute a fundamental biomechanical, clinical and radiological study.

Publication of experience in the application of blocking intramedullary metal-polymeric osteosynthesis in the treatment of fractures of long bones. In hospitals of Chernivtsi, Khmelnytsky, Dnipropetrovsk regions during the period from 1980 to 2019 about 1200 surgeries were performed with different options of BIMPO controlled electronic-optical converter (EOC). The age of patients ranged from 12 to 90. 782 patients were operated on because of fresh fractures, 418 - because of their effects (slow and improperly consolidating fractures and pseudarthrosis, bone defects). 80% of patients experienced a splinter fractures. Disorders of reparative osteogenesis were observed in 10.7% of patients. Dynamic option BIMPO was used in 91% of patients, static - in 7.6%, and detensive - 2.4%. Open BIMPO was used in surgical treatment of 48.4% of patients, half open - in 29.2%, closed - in 22.4%.

Outcome of treatment of patients indicated that good results were observed in 82.14% of patients, satisfactory - in 12.5% of patients, and unsatisfactory consequences that require further treatment were recorded in 5.36% of patients. The frequency of satisfactory and unsatisfactory results was found mainly due to the nature of injury. Analysis and synthesis of the results of BIMPO showed that metal-polymeric locking latches have several advantages: the ability to use BIMPO in reconstructive surgery of the musculoskeletal system; there is no need to use expensive navigational structures and X-ray television equipment.

Interlocking intramedullary metal-polymeric osteosynthesis has all the characteristics to take its rightful place in the arsenal of methods of operative treatment of fractures and their consequences.

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TREATMENT RESULTS OF PATIENTS WITH AZOOSPERMIA

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World widely, an estimated 15% of couples have troubles with getting pregnant naturally. According to WHO data total proportion of the infertility factor reaches 46%. Success has been achieved in the treatment of female infertility but therapy of male infertility remains not so effective. There is a steady trend of increasing of infertile men number in recent years.

The purpose of the study is to analyze the spermograms of the men who have applied for examination to Fertility center. 3000 men have their sperm examined according to WHO 2000