



content was lower than that determined diagnostically significant in plasma and equal to zero), the level of inflammatory TNF- α in these patients was lower by 20.62% ($p_{GG}=0,037$)

For R122H polymorphism of gene PRSS1, in heterozygous carriers of the mutant allele cytokine and CRP content was higher than in the GG-genotype carriers, for IL-4 – by 73,45% ($p_{GG}=0,048$), for IL-1 β – by 18,60 % ($p_{GG}=0,044$), for TNF- α – 2,24 times ($p_{GG}=0,001$), for CRP – c 2,87 times ($p_{GG}=0,005$), respectively.

For existing deletion of phenylalanine amino acid in the domain 503 of the seventh chromosome of gene CFTR (delta F508) was found a significantly lower level of IL-4, TNF- α and CRP, than with its absence: by 30,9% ($p_{NN}=0,035$), 12,75% ($p_{NN}=0,04$) and 5,19 times ($p_{NN}=0,001$), respectively.

Thus, in patients with edematous pancreatitis was observed the high production of TNF- α , IL-1 β and IL-4 in carriers of wild C-allele of the gene IL-4, NN-genotype of CFTR gene and GA-genotype of gene PRSS, that indicates increased activity of nonspecific anti-infectious immune defense factors in these patients. Systemic inflammatory response in these patients was accompanied by cytotoxic levels of CRP, which were significantly superior in patients with CC-genotype of gene IL-4 by 19,05% and 26,13%, GG-genotype of gene TNF- α – 7,95 times, NN-genotype of gene CFTR – 5,19 times and in patients with heterozygous GA-genotype carriers of gene PRSS1 – 2,87 times.

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CHANGES IN THE IMMUNE PROTECTION STATE IN DIABETIC PATIENTS WITH PYOINFLAMMATORY PROCESSES

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The immune system disorders in diabetic patients lead to a significant decrease in non-specific and specific immune anti-infectious defense by inhibiting phagocytic function of polymorphonuclear leukocytes, lowering of complement system activity, lysozyme, interferons, bactericidal activity of blood serum.

Materials and methods: diabetic patients with pyoinflammatory processes treated by traditional methods ($n=40$); diabetic patients with pyoinflammatory processes treated by ozonotherapy along with traditional treatment ($n=53$).

The obtained results confirm changes in the absolute and relative number of immune cells in the peripheral blood of DM patients: associated with pyoinflammatory processes.

A relative number of lymphocytes decreases in these patients, at the same time a tendency to growth in the absolute number of the total pool of lymphocytes is formed. The research of the immune disorders degree confirmed that therapeutic measures, including ozonotherapy, against pyoinflammatory processes in patients with DM show their effectiveness.

On admission 65,0% of patients were diagnosed with the I-II degree of immune disorders, which required immunorehabilitation; after pyoinflammatory processes therapy only 55,0% of diabetic patients were left. Special efficiency is shown in the III stage of immune disorders.

Pyoinflammatory processes in patients with diabetes occur on the background of decrease in the appropriate number of lymphocytes; increase in the absolute and relative number of monocytes, the absolute number of leukocytes due to the increase in the relative amount of neutrophilic polymorphonuclear leukocytes, as well as decrease in the absolute number of eosinophils, erythrocytes and hemoglobin and a significant increase.

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MORPHOLOGICAL CHANGES OF HERNIA SAC AND HERNIA-SURROUNDING TISSUES IN ELDERLY PATIENTS SUFFERING INGUINAL HERNIAS

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During last years the incidence of inguinal hernias in elderly grew significantly. The complications development in these patients after inguinal hernioplasty reached 6-18%. It can be explained with the fact that during surgery and postoperative period surgeons don't take all the aspects of complications pathogenesis in these patients into consideration.

The aim of the study was to evaluate the morphological changes of hernia sac and hernia-surrounding tissues in elderly patients with inguinal hernias.

For the research purpose we used biopsies of hernia tissues of 24 patients (aged 60-83, mean 67.47 ± 2.54 yrs), obtained during the inguinal hernioplasty. We paid special attention to evaluation of the muscular tissue atrophy and development of cicatrize and inflammatory changes. For investigation we assessed following tissues: hernia sac, subcutaneous cellular tissue, muscular tissue and, in some cases, preperitoneal cellular fat. Fragments of tissues were fixed and processed in accordance to histological standards.

We determined principal signs of chronic inflammation of the hernia sac in all 24 patients. In 8 (33,3%) patients we established isolated inflammation of hernia sac tissues, and in 10 (41,6%) patients it combined with chronic inflammatory changes of hernia-surrounding tissues.

In 6 (25,0%) patients with the recurrent inguinal hernias the inflammatory changes of hernia sac and hernia-surrounding tissues were very pronounced and combined with their cicatrize changes. In all patients we also established expressed atrophic changes of muscular tissue. The last can witness about the fact that the suture methods of