Karatieieva S.Yu.

THE IMMUNE PROTECTION CONDITION IN DIABETES MELLITUS PATIENTS WITH PYOINFLAMMATORY PROCESSES

Department of Patient Care and Higher Nursing Education
Higher State Educational Establishment of Ukraine
"Bukovinian State Medical University"

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 the compliment system activity, lyzocim, interferons, bactericide activity of the blood serum.

We used the next materials and methods: diabetic patients with pyo-inflammatory processes treated by traditional methods (n = 40); diabetic patients with pyo-inflammatory 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, in case of 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 stage III of immune disorders.

Pyoinflammatory processes in patients with diabetes occur against a background of a 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 a decrease in the absolute number of eosinophils, erythrocytes and hemoglobin.

Marchuk Yu.F.

COMPLEX ALGORITHM FOR DIAGNOSTICS OF CHOLELITIASIS IN PATIENTS WITH CHRONIC CHOLECYSTITIS AND DIABETES MELLITUS TYPE 2

Department of Clinical Immunology, Allergology and Endocrinology
Higher State Educational Establishment of Ukraine
«Bukovinian State Medical University»

Some separate data are usually not sufficient for improvement of early diagnostics of cholelithiasis in patients with chronic non-calculouscholecystitis combined with diabetes mellitus type 2. In this case it is necessary to use a systematic approach both in diagnostics and in correction of the detected changes.

Pathophysiology of the formation of gallstones includes 3 stages: saturation, crystallization and growth. The most unstable phase is the liquid crystals phase, when the transition to both the micellar phase and the phase of true microcrystals is possible. The lability of the physico-chemical processes occurring in the gallbladder can be used to correct the solubilization of cholesterol in bile. Therefore, as the quantitative parameter, we have chosen the crystallization factor, the value of which was determined by the ratio of the total area of the centers of crystallization to the total area of the laser image of the bile sample. This allowed us to identify pathological mechanisms at the level of the liquid crystals phase, when traditional lithogenicity indexes remain "mute". In fact, this necessitates the need for comprehensive diagnosis of the bile homeostasis disorders in these categories of patients.

It was established that in patients with chronic non-calculouscholecystitis and diabetes mellitus type 2 the main role in lithogenesis was played by the disorder of regulation of the level of cholesterol. Usually there are disorders of other parts of the lipid metabolism in patients, but the leading place belongs to the cholesterol. In patients with chronic non-calculouscholecystitis, major