

we could observe regressing cholestatic and cytolytic syndromes and a better biliary function. This was indicated by the activated hepatic protein synthetic function, which is proved by a statistically reliable grow of total protein and albumin fraction content, which increased by 15–17%.

To sum up, levocarnitine has a lipidmodulating effect under the conditions of non-calculous chronic cholecystitis with no disturbances of the biliary functional status; it improves liver function at patients with cytolytic and cholestatic syndromes. The obtained data prove, that levocarnitine is worth using for correction of the metabolic disturbances at patients with chronic cholecystitis.

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DOSE-DEPENDENT ANTI-INFLAMMATORY EFFECTS OF SYNTHETIC CANNABINOID-RECEPTOR LIGANDS

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The research was focused on the dose-dependent effect of synthetic cannabinoid-receptor ligands WIN 55,212-2 and anandamide on proinflammatory mediator expression by blood cells *in vitro*.

Aiming to study the dose-dependent effect of WIN 55,212-2 and anandamide (0,1; 1,0; 3,0 and 10,0 mcM) *in vitro*, blood probes were taken from 12 volunteers, whose level of proinflammatory mediators: cytokines (tumor necrosis factor (TNF- α), interleukin 8 (IL-8)) and eicosanoids (leukotriene B4 (LTB4), thromboxane B2 (TXB2)) did not exceed norms. Blood cells were stimulated by lipopolysaccharide (LPS) *Escherichia coli* in dose 10 mg/ml. Basal and LPS-stimulated cytokine and eicosanoid production in whole blood was measured by means of the immunoenzymometric assay.

It was shown, that a spontaneous level of proinflammatory mediators in the blood probes, obtained from the donors, did not exceed the following values: TNF- α - 80 pg/ml, IL-8 - 115 pg/ml, LTB4 - 110 pg/ml and TXB2 - 210 pg/ml. After the LPS-stimulation of the blood cells, the expression of mediators TNF- α increased 20-fold, IL-8 eight-fold, LTB4 12-fold and TXB2 two-fold. The experiment showed, that low concentrations of WIN 55,212-2 and anandamide did not change the mediator production by LPS-stimulated blood cells. In concentration of 3,0 mcM, anandamide and WIN 55,212-2 reduced the synthesis of TNF- α , IL-8 and LTB4. The strongest inhibiting effect on blood cells was achieved at concentration of 10,0 mcM. There were revealed no influence

of the studied substances in different doses on TXB2 synthesis.

To sum up, the research on the dose-dependent effect of cannabinoid substances on proinflammatory mediator expression by blood cells showed, that cannabinoid-receptor ligands WIN55,212-2 and anandamide have a unidirectional anti-inflammatory effect on TNF- α , IL-8 and LTB4 synthesis in human whole blood. The obtained data on the inhibiting effect of synthetic cannabinoids WIN55,212-2 and anandamide on proinflammatory mediator production could be used to develop new approaches to anti-inflammatory treatment.

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A MODEL OF EXAMINATION STRESS FOR THE DEVELOPMENT OF DETERMINED COLOURSTIMULATION ORIENTATED ON THE MODIFICATION OF THE FUNCTIONAL STATUS OF THE PATIENTS

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There is no other psychological term which is connected to our life as close as stress. Stress at home, in transport, at work and even during sport competitions. When stress mobilizes, for example sportsmen, it is positive factor. Otherwise, especially when it gets out of the control, it should be recognized as a destructive element of subsequent pathology formation. That includes people injured by nature-technological disasters.

Biocontrol is unique modern medical technology, which makes patient an active part of the medical-rehabilitation process.

Biocontrol is a complex of ideas, methods and computer technologies based on biofeedback, orientated on the development and perfection of physiological functions self-control mechanisms in normal condition or with a lot of pathologies. During the biocontrol procedure the information on different physiological functions will be given to the object by the external feedback arranged through a computer. It lets the examinee to learn how to control their physiological parameters and use this ability in daily life [1].

There is a problem commission on the hronobiologic and hronomedicine in Moscow (the chairman is academician F.I Komarov). The commission makes scientific researches orientated on practical use of biocontrolled colourstimulation and colourtherapy (the head is F.A. Pyatakovich).

BFB-therapy for the clinical appendices is divided into: BFB-EEG- therapy, BFB-GRS- therapy