THE CONDITION OF C-FOS GENE IN THE NEUROSECRETORY NUCLEI OF THE HYPOTHALAMUS IN RATS STRESSED BY LIGHT AND THE EFFECTS OF MELATONIN AND EPITHALON

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Key words: melatonin, epthalon, gene - protein c-Fos, epiphysial hypofunction

The aim was to study the effect of melatonin and a synthetic bioregulator – epthalon for the purpose of correction stress-induced changes of the activity of the gene of "ultraearly response" c-fos in the lateral large cell subnuclei of the paraventricular nucleus (IIPVN) of the rat hypothalamus at different intervals of 24hour period (in the daytime and at night). The expression of the product of this gene protein c-Fos – in animals kept under normal conditions of alternating illumination and darkness demonstrated a clear-cut circadian pattern (with a higher level by day). The diurnal index of the c-Fos content in the animal's IIPVN is lower by 33,0%, under conditions of light stress, whereas the nocturnal one approximated to the control values. An injection of melatonin (0,5 mg/kg) to light-stressed animals reflected at 02.00 p.m. hundred by exceeding the index of the c-Fos protein in the animal's IIPVN almost twofold compared to the experimental findings on stressed animals without hormone introduction, as well as by a normalization of the circadian dynamics of the expression of the gene under study. An augmentation of the index of the c-Fos protein concentration was disclosed in the structure upon using tetrapeptide epithalon (0,5 μ g/kg) at night in relation to individuals with epiphysial hypofunction without undergoing experimental therapy with epithalon. No such effect was fixed at night.

HELICOBACTER PYLORI SEROPOSITIVITY IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Key words: chronic obstructive pulmonary disease, ulcer, stool-test, urease test

Introduction. In recent years serious attention has been paid to the study of extrapulmonary manifestations in patients with chronic obstructive pulmonary disease (COPD), of which combined defects of the gastrointestinal tract are of great concern.

The aim of the investigation was put to the role of COPD in the development of the erosive and ulceral defects of the gastroduodenal area.

Materials and methods. 79 patients were examined. Among them 25 patients without COPD belong to the control group. 26 patients without COPD but with high level IgG Hp consist the second group. And the third group include 28 patients with COPD and erosive and ulcerous defects of gastroduodenal area.

Patients' age fell into the range between 30 and 72.

Patients were diagnosed using PC-based spirometry, fibrogastroduodenoscopy, intragastric pH, Stool-test and rapid urease test of biopsy.

Results. In patients of the 1-st and the 2-nd group we observed the normal range of the spirometry indicators, but the same indicators were reduced in patients of the 3-rd group.