

difference between the behaviour of students from different institutions, only knowledge in the field of IT-Sand contraception varies, prevailing at USMF "Nicolae Testemitanu".

Keywords: Young persons, reproductive health, family planning, sexual behaviour.

THE DETERMINATION OF THE MELATONIN RECEPTORS EXPRESSION (MT-1, MT-2) IN A STOMACH AND DUODENAL MUCOUS MEMBRANE AS A WAY TO PREDICT THE PYLOROBULBAR ULCERS ACTIVITY

Gryazev A., Presnov R.

Academic adviser: Osmanov Z., M.D., Ph.D., Sankt Petersburg State Medical University "I.P. Pavlov", Sankt Petersburg, Russian Federation

Introduction: In spite of all prognoses by the late 1980's the revision of the medicament treatment principles didn't lead to expecting complication rate decreasing.

Furthermore, over the last 10 years the number of patients with stomach and duodenal ulcers, which enter the hospitals in Russia because of ulcer perforation, increased in 2,7 times and the number of ulcer bleeding patients – in 2,2 times.

All this evidences point out the necessity to determine new factors of the ulcer pathogenesis and to find new mechanisms of the ulcer formation.

Subject to melatonin properties at the level of the whole body (biorhythm, antioxidant, immunomodulatory effect) and also at the level of the digestive system (participation of the motor activity, microcirculation and proliferation); it's easy to see, that a melatonin plays a great part in pathogenic mechanisms of the ulcer formation and exacerbation. Recently the papers, pointing to receptor-mediated mechanism of the melatonin anti-inflammatory effect, appeared.

Aim: This study's aim is to determine connection between receptor expression to melatonin (MT-1, MT-2) and probable ulcer complication prognosis.

Materials and methods: Our research consists of two parts. In experimental one we got primary specific antibodies to MT-1, MT-2. The peptide, duplicating amino-acid sequence of active MT-1, MT-2 receptor centers, was synthesized in Research institute of particularly clean biological preparation.

In clinical part we exposed stomach and duodenal mucous membrane cells with MT-1, MT-2 receptors by indirect immunofluorescence. 35 patients were researched, they divided into few groups: uncomplicated ulcer – 16 patients, ulcer with perforation – 6, ulcer with bleeding – 5, control group – 8.

Results: In uncomplicated ulcer group there were 7% MT-1 and 6,5% MT-2 melatonin receptors, in ulcer perforation group: 9,56% MT-1 and 2,53% MT-2; in ulcer bleeding group – 10,56% MT-1 and 1,46% MT-2; in control group – 16% MT-1 and 14,7% MT-2. After carefully examination of the groups with complications it was founded, that 85% patient has a similar melatonin receptor distribution (the receptor number decreased and decreasing MT-2 relative to MT-1 – 4 times).

It was exposed 4 patients in group without complications, which can be in a complication group according to results. We can suppose that they are in a risk group of the ulcer complications and they need more careful control and perspective researching.

Conclusions:

- Patients with any ulcer defect have depressed level of the melatonin receptors.

- There is decrease of MT-2 receptors relative to MT-1 in 4 times in group of patients with ulcer complication. It can be used in complication prediction.
- Probably, the duration of ulcer case history influences the melatonin receptor expression, but we need additional study and general sampling to prove this.

Key words: melatonin, pylorobulbar ulcers.

BIOCHEMICAL ANALYZE AS INDIRECT MARKER OF SEPSIS

Glavan Dan

Academic adviser: Cernit V., M.D., University Assistant, Bahnaru V., M.D., State Medical and Pharmaceutical University "Nicolae Testemitanu", Chisinau, Republic of Moldova

Introduction: Sepsis is a complex pathophysiological disorder arising from systemic inflammatory response to infection. The inflammatory cascade has two limbs: one- inflammatory and one- pro-coagulant. Endothelium plays an important role in activation of clotting system and, simultaneous, in suppression of fibrinolytic system, that appears to be an essential component in the development of multi-organ failure (MOF). The objective of this study is analysing and describing clinical signs and biochemical values in adults with sepsis syndrome, which could allow the screening of indirect features of sepsis followed by early treatment as soon as possible.

Methods: Thirty patients meeting the inclusion criteria who got admitted to the ICU at Municipal Clinical Hospital N3, Chisinau, between 2008-2010 were studied. Detailed history was taken and physical examination performed. Patients were investigated according to the clinical situation as defined by criteria set by the ACCP/SCCM Consensus Committee. Biochemical values were done on admission to detect metabolic derangements and organ dysfunction. The tests were repeated during 7 days depending on the severity of the derangement.

Results: The patients were divided into two groups: the first group-20 patients with septic complications and the second group- 10 non-septic patients. The comparative analyze of biochemical profiles was performed between the groups. Thus, in the first group, on admission, the average level of fibrinogen is 5,102 g/l and the average level of indirect bilirubin is 20,14 mcmol/l. The correlation coefficient between prothrombin and ASAT is - 0,89434. In the second group, on admission, the average level of fibrinogen is 5,14 g/l and the average level of indirect bilirubin is 29,16 mcmol/l. The correlation coefficient between prothrombin and ASAT is 0,091.

Conclusions: Biochemical profile analyze of patients from both groups reveals a multiple organ dysfunction (MOD) in first hours of septic process. Thus, the indirect relation between hepatocyte injury markers (ALAT/ASAT) and prothrombin reveals hepatic failure, triggered in first hours of sepsis. Fibrinogen elevated levels in first 24-72 h reveals the suppression of fibrinolysis and the activation of clotting system with the spread of microthrombi in the microcirculatory bed and perfusion disorders. Hyperbilirubinemia due to indirect bilirubin confirms hepatocyte affection with the involvement of microsomal enzyme systems, which are exhausted in hypercatabolism conditions and ATP deficiency. The study confirms the alteration of clotting system, even in the first hours of septic process installation and the necessity of early supervised thrombolytic therapy.

In the absence of specific markers in sepsis diagnosis, we could sense the evolution of septic complications through indirect analyze of patient's biochemical profile with the early beginning of resuscitation therapy.