

Danish scientific journal
DSJ 



Danish Scientific Journal

Nº84 2024

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DYNAMICS OF FREE RADICAL PROCESSES IN PATIENTS WITH STAGE II II WITH GASTRODUODENAL PATHOLOGY

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<https://doi.org/10.5281/zenodo.11396675>

Abstract

The article highlights the main changes in free radical processes in patients with stage II II on the background of gastroduodenal pathology. It is established that it is gastroduodenal pathology, namely peptic ulcer and erosive changes that complicate the course of the underlying disease.

Keywords. CHNC, stage, gastroduodenal area, *Helicobacter pylori*, etiology, epigastric, kidneys.

Actuality of theme. Over the last two decades, the basic views on the pathogenesis of the vast majority of diseases of the gastroduodenal region have changed significantly. The substantiation of the etiological role of *Helicobacter pylori* (HP) in their occurrence has been reflected in the treatment strategy [7, 10], although a significant number of questions remains not yet resolved and requires appropriate research.

It is known that in the diagnosis of kidney pathology, namely CRF, before and after transplantation of the kidney into a complex of diagnostic measures use the definition of N.Pylori-status. Pathological changes are found in 85-90% of patients with CRF during the upper endoscopy [4, 6, 16]. At the same time, erosive and ulcerative lesions of the stomach and duodenum bulbs occur in 10% of cases in conservative treatment, which is 3-3.5 times less than the frequency of their detection in patients with CRF, who are treated with supportive dialysis (30%), and recipients of renal transplant (36%). The frequency of erosive and ulcerative lesions of the gastric mucosa is directly proportional to CRF. Initial changes in CRF are characterized by focal hyperemia of the mucous membrane, vinging, swelling and thickening of the folds. Endoscopic examination of the upper sections of the digestive canal should be performed by all patients with CRF before and after transplantation of the kidney, regardless of the presence and severity of clinical symptoms, since there is no correlation between the severity of structural changes of the mucous membrane and the frequency of detection and the severity of the symptoms of the upper henum [9]. . Therefore, in patients with CRF after kidney transplantation, the serological method of diagnosis of N. Pylori infection cannot be used as screening due to its low sensitivity [2, 13, 14]. All patients with CRF with the presence of HP infection should be carried out eradication therapy according to conventional schemes, since this category of patients has an increased risk of erosive and ulcerative lesions of the upper sections of the digestive canal and bleeding [3, 5, 15].

Today, the possibility of damaging effects on the digestive organs of some gastrointestinal and

corticosteroid peas at CRF is discussed [8, 11]. First of all, it concerns gastro -glypeptide and glucagon, but the mechanisms of such negative effects have not been studied.

There fore, of particular interest is the study of the features of the course, new approaches to the diagnosis and correction of patients with a combined pathology, in particular in patients with stage II II with the presence of lesions of the gastroduodenal region, in order to slow down the rate of progression and improve the quality of life of patients.

The aim of the study. Assessment of the dynamics of oxidative processes in patients with stage II CHF with lesions of the gastroduodenal region.

Materials and research methods. For the realization of this goal with the help of modern biochemical and instrumental methods of research, 153 patients with stage II II, who were in hospital in nephrological and gastroenterological departments of the Chernivtsi Regional Clinical Hospital "Chernivtsi" were examined. Group 1 included patients with the 2nd century. Without EUSDPK (erosive and ulcerative lesions of the stomach and duodenum), in group 2 - patients with 2nd century. Without EUSDPK, group 3 was almost healthy persons (PCO) (N = 15).

All patients were conducted a full range of clinical and laboratory and instrumental research methods. Esophagogastroduodenofibroscopy and ultrasound examination of the abdominal organs were performed in 100% of patients.

The diagnosis of CCF is made on the basis of the presence of kidney damage for more than 3 months, the manifestation of which were structural or functional disorders of the organ with a decrease in the speed of glomerular filtration (GFR).

Diagnosis of gastric and duodenal ulcerative disease was established in accordance with the WHO Classification (1999) and the order of the Ministry of Health of Ukraine dated 13.06.2005 No. 271 on the basis of endoscopically confirmed ulcerative defect in the DPK or stomach.

The intensity of the final products of free radical oxidation was evaluated by spectrophotometric

determination of the content of MDA in the blood and urine by the modified method of ND steel (1972) [1]. The method is based on the reaction of MDA with 2-tbarbituric acid, which at 950 C and acidic pH forms a colored trimetine complex. Reagents were used to determine blood and urine MDA: 0.025 m Tric-HCl buffer (pH 7.4) containing 0.175 m of potassium chloride; 17% solution of trichloroacetic acid; 0.8% aqueous solution of 2-tobarbituric acid (TBK). After the centrifugation, precipitation and measurement of the optical density of the colored solution, the MDA was calculated using the magnitude of the molar coefficient of extinction of the trimetin complex.

Statistical analysis was performed using Statistica for Windows 6.0.

Research results. The results of our studies have shown that there is a significant difference in the course of peroxide processes in the blood of patients with stage II II (CP), depending on the presence or absence and nature of the lesions of the gastroduodenal area. Thus, in the serum of patients with CCI without the presence of EUSDPC and in the group of patients with the presence of EUSDPC there was a significant increase in the content of aldehyde and kelethytitrofenylhydrazhisones of neutral and basic nature compared to the age rate of 1.7 times and 1.9

times (p. . In patients with CCI with the presence of EUSDPC, the content of 2,4-dinitrofenylhydrazones increased by 2.3 times and 2.2 times ($P \leq 0,001$). Patients with EUushdPC have a significant increase in the content of aldehyde and ketonda-nitrofenylhydrazones of neutral nature by 31.4% ($P \leq 0,001$), and aldehyde and kelethyrofenylhhydrazins of the main nature- by 20.7% ($p \leq 0,05$) in Comparison with such in patients without the presence of EUSDPC, which may indicate the accumulation of oxidatively modified proteins in the blood due to the inhibition of their proteolysis and should be considered one of the signs of erosive and ulcerative lesions of the stomach and UPC. The data we obtained indicate that the activity of GPO processes in patients with stage II (CP) (CP) depends to a certain extent on the presence stages (CP) without EUushdpc. Table 1 shows a significant increase ($p < 0,05$) of the content of aldehyde and kelethytitrofenylhydrazones of neutral nature compared to normal quantities in patients without EUSDPC. When combined with CCI with EUushdpc, the value of this indicator significantly increased ($p < 0,05$) compared to the relevant data of patients who had no pathological changes from the gastroduodenal region.

Table 1

The content of brod molecular products in patients with stage II (cp) (cp) depending on the presence EUUSHDPC ($M \pm m, n$)

Indexes	Groups of surveyed		
	Almost healthy persons n = 15	Patients with CHRN II ct. Without EUUSHDPC n = 35	Patients with CHRN II ct. With EUUSHDPC n = 86
Aldehyde- and kendomy-nitrofenylhydrazones of neutral character, mmol/g protein	1,37±0,05	2,35±0,09*	3,09±0,14*/**
Aldehyde- and kendomy-nitrofenylhydrazones of the main nature,, o.o. g/g protein	14,20±0,54	26,38±1,41*	31,84±1,79*/**
Little aldehyde, µmol/l	3,95±0,20	6,09±0,32*	7,70±0,39*/**

Note. : * - reliability of differences ($p < 0,05$) compared to normal in healthy persons;

** - the reliability of differences ($p < 0,05$) between patients with EUUSHDPC and without EUSDPC;

The corresponding changes occurred from the indicators of aldehyde and kelethytrophenylhydrazones of the main nature in patients without EUSDPC compared to the norm ($p < 0,05$) and compared to the data of patients who had EUSPK ($p < 0,05$) (Table. 1).

The content of low -aldehyde increased significantly compared to the norm in both groups of patients under study ($p < 0,05$), and in patients who had damage to the gastroduodenal area of the MDA, the content of MDA was much higher (its level increased by 74.7% ($p \leq 0,001$) Compared to patients without EUSDPC ($p < 0,05$).

Conclusion. A significant pathogenetic factor in the occurrence of erosive-ulcerative lesions of the stomach and duodenum in patients with stage II-III stage is the increase in the intensity of the processes of Lipid Lipid and the oxidative modification of serum proteins (mainly by aldehyde and ketondinitrofenylhydhyzones.

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