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## **TREATMENT OF PATIENTS WITH CHRONIC GASTRITIS AND DUODENAL ULCER BY NONPHARMACOLOGIC FACTORS**

**SUMMARY.** The effect of mineral water on gastric acid secretion, reparative processes and endocrine regulation of gastroduodenal system in patients with chronic gastritis and duodenal ulcer were carried out in this study. It was found that mineral water can be used in mentioned category of patients either as basic treatment factor or in combination with antisecretory drugs for decrease the dose of the last one.

**KEY WORDS.** Chronic gastritis, duodenal ulcer, hyperacid syndrome, mineral water, pH-metry.

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## **ERADICATION OF HELICOBACTER PYLORI INFECTION IN DUODENAL ULCER PATIENTS. SIDE EFFECTS OF STANDARD TRIPLE THERAPY**

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**PURPOSE:** To investigate the efficacy and drug-related side effects of a regimen that included proton pump inhibitors (PPIs), clarithromycin and amoxicillin in patients with Helicobacter pylori (Hp)-positive duodenal ulcer.

**MATERIAL AND METHODS.** The study included 50 Hp-positive patients with duodenal ulcer. Hp infection was confirmed by a histological examination of samples obtained from the antrum and corpus of stomach during endoscopy and non-invasive Breath HELIK-Test. The

eradication therapy consisted of 10-days twice daily oral administration of PPIs in standard dose, amoxicillin 1000 mg, clarithromycin 500 mg, then 20-days twice daily PPIs. Therapeutic success was confirmed by a negative histological examination and Breath HELIK-Test, performed 4-12 weeks after treatment.

**FINDINGS.** Before the treatment 82% of patients had pain syndrome and 70% - dyspeptic complaints. During the treatment in 50% of patients increased the frequency of dyspeptic complaints and in 42% of them such complaints appeared for the first time and continued during 1,5 months after treatment. The eradication rate was 70%. Healing of duodenal ulcer was noted in 82% cases. The level of basal pH was significantly ( $p < 0,001$ ) increased in the corpus of stomach from  $1,39 \pm 0,41$  to  $1,83 \pm 0,31$ , in antrum  $1,97 \pm 0,29$  to  $2,52 \pm 0,34$  and in the duodenum from  $4,09 \pm 0,59$  to  $5,14 \pm 0,95$ . After treatment significantly increased the levels of alanine transaminase from  $36,78 \pm 0,78$  to  $42,52 \pm 1,22$  IU/L, asparagines transaminase from  $36,36 \pm 0,79$  to  $40,76 \pm 1,27$  IU/L, alkaline phosphatase from  $96,90 \pm 1,37$  to  $101,24 \pm 2,17$  IU/L, and triglycerides from  $1,57 \pm 0,07$  to  $1,72 \pm 0,10$  mmol/l, which must be noted as drug-related side effects of clarithromycin-based triple therapy. Increase of the levels of bilirubin from  $19,41 \pm 0,24$  to  $20,88 \pm 0,34$  mmol/l and cholesterol from  $5,17 \pm 0,16$  to  $5,56 \pm 0,19$  mmol/l were not statistically significant.

**CONCLUSIONS.** Standard triple Hp eradication therapy based on clarithromycin has low efficacy (70%), causes or increases the frequency of dyspeptic complaints associated with the use of antibiotics, has a hepatotoxic effect.

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## **ABILITIES OF NONPHARMACOLOGIC REMEDIES IN THE TREATMENT OF HELICOBACTER PYLORI-ASSOCIATED DUODENAL ULCER PATIENTS**

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**PURPOSE:** To investigate the effect of probiotics and mineral water in the treatment of patients with Helicobacter pylori (Hp) -positive duodenal ulcer.

**MATERIAL AND METHODS.** In this study 200 Hp-positive patients with duodenal ulcer were randomized into 4 groups, 50 patients in each. Hp infection was confirmed by a histological examination of samples obtained from the antrum and corpus of stomach during endoscopy and non-invasive Breath HELIK-Test. Intra-gastric and intraduodenal pH-metry, blood analyses also were performed. The following eradication regimens were recommended: Group I: 10-days twice daily oral administration of proton pump inhibitors (PPIs) in standard dose, amoxicillin 1000 mg, clarithromycin 500 mg, then 20-days twice daily PPIs plus once daily oral administration of probiotics, containing Lactobacillus bulgaricus DDS-14, Lactobacillus rhamnosus, Lactobacillus acidophilus DDS-1 and Bifidobacterium bifidum during one month; Group II: PPIs and probiotics once daily and alkaline hydrocarbonate-chloride sodium mineral water Essentuki-4 200 ml trice daily during one month; Group III: PPIs and probiotics once daily and chloride sodium mineral water Minsk-4 200 ml trice daily during one month; Group IV: probiotics and PPIs once daily during one month. Therapeutic success was confirmed by a negative histological examination and Breath HELIK-Test, performed in 4-12 weeks after therapy.

**FINDINGS.** In Group I dyspeptic complaints disappeared in 74%, and decreased in 20%. Disappearance of dyspeptic complaints was 78%, 76% and 74% in II, III and IV groups respectively. Decrease of dyspeptic complaints was 20%, 22% and 24% in II, III and IV groups respectively. The eradication rates were 82%, 80%, 78% and 68% in I, II, III and IV groups, respectively. Healing of duodenal ulcer was noted in 84%, 86%, 84% and 78% of cases, in I, II,