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Article/Review

CLINICAL FEATURES OF GASTROINTESTINAL TRACT LESIONS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Abstract.

Relevance. Systemic lupus erythematosus is a common disease among rheumatic diseases of childhood. The frequency of the disease has a steady upward trend due to changes in the environment and eating disorders. **The aim of the study** was to evaluate the expected effect of antiulcer therapy with histamine H2-receptor blockers on the condition of the gastric mucosa in patients taking GCS for a long time. **Materials and methods of research.** The study prospectively evaluated the effect of antiulcer therapy on the morphological picture of the stomach in 56 patients with SLE who had been continuously taking corticosteroids for a long time. **The results of the study.** The positive effect of successful ranitidine therapy on the condition of the gastric mucosa was observed in patients with SLE who had been continuously using GCS for a long time and continued to take these drugs. **Conclusion.** A prospective assessment of the morphological effects of anti-ulcer therapy in patients with SLE who had been using corticosteroids for a long time and continued to take them showed a statistically significant positive trend in the morphological parameters of the antrum and fundus of the stomach.

Key words: Systemic lupus erythematosus, glucocorticosteroids, gastrointestinal pathology.

Systemic lupus erythematosus (SLE) is a systemic autoimmune disease of unknown etiology, characterized by a genetically determined disorder of immune regulation that leads to the formation of autoantibodies against self-proteins and the formation of immune complexes, which drive the development of immune-mediated inflammation in the tissues of many organs.

Currently, the most commonly used medications for SLE are glucocorticoids, and the use of these medications is associated with an increased frequency of mucosal damage in the gastroduodenal zone and leads to the development of serious complications in the gastrointestinal tract [1-5]. These drugs are the main risk factors for the development of gastrointestinal tract pathology in patients with SLE, induced by the use of GCS, however, the relationships between these causes are poorly studied [4,5,6]. In patients taking GCS, there is an increase in the frequency of erosions and ulcers in the gastroduodenal zone (45%). International guidelines for the prevention of GCS-gastropathy state that the positive effect of anti-Helicobacter therapy is noted among those children who have just been prescribed drug therapy using GCS. Many studies have examined the morphological effects of successful anti-Helicobacter therapy; however, there are only a few studies that have assessed the morphological parameters of the gastric mucosa after therapy with H2-receptor antagonists in patients who have been using GCS for a long time [6]. Therefore, studying these issues will lead to the possibility of clarifying the following tasks: is it necessary for patients who have been using GCS for a long time to recommend anti-ulcer therapy with H2-receptor antagonists, and what effect does successful therapy have on the morphological parameters of the gastric mucosa.

Objective: To evaluate the prospective effects of anti-ulcer therapy with histamine H2-receptor blockers on the condition of the gastric mucosa in patients who have been taking GCS for a long time.

Materials and Methods: The study prospectively assessed the effects of anti-ulcer therapy on

the morphological picture of the stomach in 56 SLE patients who had been using GCS continuously for a long time.

All patients underwent esophagogastroduodenoscopy (EGD) with biopsy of the gastric mucosa. If erosive-ulcerative lesions in the gastroduodenal region were detected during EGD, NSAID-induced gastropathy was diagnosed. Morphological analysis of gastric mucosal biopsies assessed indicators of activity, inflammation, atrophy of the gastric mucosa, and the number of lymphoid follicles. A four-level visual analog scale was used to describe the gastric mucosa. Patients in the first group (Group I) received anti-ulcer therapy with ranitidine 500 mg per day (a histamine H2-receptor blocker). Patients in the second group (Group II) did not receive anti-ulcer therapy. Patients in both groups had been taking NSAIDs continuously for a long time before inclusion in the study and continued to use them thereafter. Group I, which included 40 patients, received anti-ulcer therapy. Participants in the comparison group did not receive anti-ulcer therapy. There were no significant differences in age ($p>0.05$), duration of SLE ($p>0.05$), or duration of GCS use ($p>0.05$) between the group treated with ranitidine and the comparison group, which did not receive anti-ulcer therapy. The success of therapy was assessed no earlier than 2 months after treatment. Two weeks before repeat EGD with biopsy, participants were not allowed to take antisecretory or antibacterial medications. Treatment effectiveness was determined by a simultaneous negative result of histological examination of gastric mucosal biopsies. The endoscopic effects of therapy on the risk of erosions and ulcers in the gastroduodenal region were assessed 6±1.5 months after H. pylori eradication in 40 participants (Group I) and 16 patients in the comparison group (Group II), where anti-ulcer therapy was not performed.

Results: A repeat study was conducted 6 months after gastroprotective therapy. The evaluation of treatment results showed that 4 (15%) out of 26 patients had ulcers. Therefore, the success rate of therapy was 85%. Morphological effects were also assessed in patients with successful therapy (26 patients, Group I) and in participants who did not receive similar treatment (20 participants, Group II). There were no statistically significant differences between Groups I and II in the timing of the repeat examination ($p=0.19$). Initial morphological examination of gastric mucosal biopsies showed no statistically significant differences ($p>0.05$) in morphological parameters of the gastric mucosa (activity, inflammation, atrophy, number of lymphoid follicles) between patients in Group I (those with successful gastroprotective therapy) and Group II (comparison group). A repeat assessment of the effects of successful therapy was performed in 26 participants in Group I after 3 months. The prospective study revealed a statistically significant reduction in the gastric antrum: activity ($p<0.001$) by 50.3%, inflammation ($p<0.001$) by 24.0%, and atrophy ($p=0.017$) by 26.4%.

In the gastric fundus, there was a statistically significant reduction in activity ($p<0.001$) by 54% and inflammation ($p<0.001$) by 34%.

Thus, a positive effect of successful ranitidine therapy on the condition of the gastric mucosa was observed in patients with SLE who had been using GCS continuously for a long time and continued to take these medications.

Discussion: The obtained data indicate that successful anti-ulcer therapy is accompanied by an improvement in the condition of the gastric mucosa. Currently, the effects of anti-ulcer therapy on the morphological parameters of the gastric mucosa over various time intervals are widely discussed. Many studies have shown positive dynamics in the morphological parameters of the gastric mucosa after successful treatment [5,6]. Although there are many studies on the morphological effects of anti-Helicobacter pylori therapy, there are only a few prospective studies on the effects of anti-ulcer therapy on the gastric mucosa in patients who have been taking GCS for a long time. The obtained data on the combined effects of GCS and H. pylori in the development of pathological changes in the gastric mucosa are contradictory. One study showed that anti-Helicobacter pylori therapy reduces activity and inflammation in the gastric mucosa compared to patients who did not undergo H. pylori eradication [5-6]. At the same time, a study by M. Frezza et al. found that the persistence of H. pylori does not worsen the condition of the gastric mucosa [5]. Therefore, the interaction between H. pylori and long-term GCS use is of global importance.

Conclusion: In a prospective assessment of the morphological effects of anti-ulcer therapy

in SLE patients who had been using GCS for a long time and continued to take them, a statistically significant positive trend in the morphological parameters of the gastric antrum and fundus was observed.

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