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**COMPLEX TREATMENT OF PERIODONTITIS WITH PEPTIC ULCER OF THE STOMACH AND
DUODENUM USING MEXIDOL*****Jabbarova Zarnigor****Assistant of orthopedic dentistry, 5th year students of the Faculty of Dentistry, Samarkand State Medical University, Uzbekistan****Lutfullayev Qobil****Assistant of orthopedic dentistry, 5th year students of the Faculty of Dentistry, Samarkand State Medical University, Uzbekistan****Musirmanov Abdusalim****Assistant of orthopedic dentistry, 5th year students of the Faculty of Dentistry, Samarkand State Medical University, Uzbekistan*

ABOUT ARTICLE**Key words:** Traditional methods, antioxidant, antihypoxic.**Received:** 17.03.2024**Accepted:** 22.03.2024**Published:** 27.03.2024**Abstract:** Traditional methods of treatment of inflammatory periodontal diseases are aimed at eliminating microbial factors, including the control of plaque formation, the use of topical and general antibacterial agents, anti-inflammatory drugs, as well as improving surgical methods for eliminating infectious and destructive foci in periodontitis.

INTRODUCTION

Traditional methods of treatment of inflammatory periodontal diseases are aimed at eliminating microbial factors, including the control of plaque formation, the use of topical and general antibacterial agents, anti-inflammatory drugs, as well as improving surgical methods for eliminating infectious and destructive foci in periodontitis. However, they are not always effective enough and often do not prevent exacerbation of pathology. The use of antioxidants and antihypoxic agents is promising in the complex treatment of chronic gingivitis and periodontitis in combination with peptic ulcers of the stomach and duodenum [1,2]. In recent years, the antioxidant mexidol (3-hydroxy-6-methyl-2-ethylpyridine succinate), a structural analogue of vitamin B6 compounds, has been

successfully used in many areas of clinical medicine [3]. Mexidol has antioxidant, antihypoxic, immunomodulatory and antibacterial effects [4, 5]. The aim of the study was to increase the effectiveness of treatment of patients with inflammatory periodontal diseases against the background of gastric and duodenal ulcer and duodenal ulcer.

METHOD

To evaluate the effectiveness of the inclusion of mexidol in the complex treatment of inflammatory periodontal diseases against the background of gastric and duodenal ulcer, patients were divided into 2 main groups. Group I consisted of 90 patients with inflammatory periodontal diseases and duodenal ulcer and 59 patients with gastric ulcer who received standard dental treatment and first-choice eradication therapy for 7 days. In group II (85 patients with inflammatory periodontal diseases and duodenal ulcer and 62 patients with gastric ulcer), mexidol was added to treatment. The scheme of application of the drug: 2 ml of 5% solution is applied or instilled intramuscularly 1 time a day, 1 time into the periodontal pocket 2-3 times a day (method of preparation: Open 1 ampoule of the drug and moisten the turunda solution placed in the periodontal pocket for 20 minutes). It was recommended to brush your teeth 1-2 times a day with toothpaste from the "MEXIDOL dent" series for 3-5 minutes. The control group consisted of 25 practically healthy individuals. All patients underwent comprehensive treatment of periodontal diseases, including professional oral hygiene, conservative treatment according to generally accepted schemes, as well as surgical removal of periodontal pockets in accordance with indications. Treatment of patients with UB is based on the recommendations of the Maastricht Conference III2005, proton pump inhibitors — omeprazole 20 mg 2 times a day and two antibacterial drugs: clarithromycin 500 mg 2 times a day and amoxicillin 1 g 2 times a day, 7 days, then omeprazole 40 mg / day for 4-6 weeks. The assessment of the condition of the teeth is carried out according to the method V.S. It was carried out in accordance with Ivanov's recommendations.[6] In the diagnosis of inflammatory periodontal diseases, it was adopted by the XVI plenum of the All-Union Dental Association (1983), G.M. and T. et al. I. The classification supplemented by Lemetskaya (1996) was used. The diagnosis of IBD was based on classical criteria [7] and was carried out taking into account clinical and endoscopic, functional and morphological data. The hp condition in the stomach and periodontal pockets was determined by bacteriological examination of tissues and immunofluorescence using a set of "DAKO" reagents. Criteria for inclusion of patients in the study: Men and women aged 18-60 years, suffering from chronic generalized catarrhal gingivitis or chronic generalized periodontitis on the background of gastric and duodenal ulcer in the acute phase, signed an informed consent protocol on the purpose and nature of the work. Exclusion criteria: anomalies and

deformities of teeth, extensive defects and pathological erasure of the dentition, patients with orthodontic devices; the presence of complications and peptic ulcer of the duodenum and stomach (bleeding, perforation); long-term non-scarring gastric ulcer (more than 12 weeks) and duodenum (more than 8 weeks); the presence of concomitant diseases of the digestive system (chronic pancreatitis, chronic cholecystitis, chronic hepatitis in the acute phase); diabetes mellitus; severe concomitant diseases (myocardial infarction, acute cerebrovascular accident); tumors of any localization; treatment regimens with a complex allergic history of the drug; Refusal of the patient from examination. Louis, USA, titer 1:200) protein Ki-67 (1:100, Novocastra), anti-apoptotic protein Bcl-2 (1:100, Novocastra), anti-apoptotic protein Bcl-2 (1:100, Novocastra), anti-apoptotic protein Bcl-2 (1:100, Novocastra), anti-novocastra), rabbit antibodies to melatonin (1:100, cidtech Res.). The concentrations of interleukin-6, Interleukin-10, interleukin-12 and Interleukin-18 in the oral solution were measured using sets of reagents Interleukin-6 and Interleukin-10 (Cytokine LLC, Russia), Interleukin-18-IFA-BEST (Vector-Best CJSC, Russia) and Interleukin-12+p40 (Vector-Best CJSC, Russia). It was measured by solid-phase enzyme immunoassay using the Uniplan enzyme immunoassay analyzer (IBL, USA). Statistical processing of the research results was carried out using the Statistica software package, and the average value and errors of the average value were determined using the Student and Mann-Whitney reliability criteria. The study was approved by the Ethics Committee of Saratov Medical University. Results. Against the background of mexidol therapy, all patients noted the cessation of pain, a decrease in bleeding 2-3 days after the start of treatment. The effectiveness of traditional therapy supplemented with mexidol therapy in patients with gingivitis and periodontitis of varying severity is confirmed by the positive dynamics of clinical criteria for assessing the periodontal condition, including changes in dental parameters. According to almost all certain studies (hygiene index, gum bleeding index, PMA, periodontal index), at the 2nd week of treatment and 2 months after the start of treatment, this indicator in group II patients was significantly lower than in group I patients. Remission of gingivitis and periodontitis of mild severity in group II was achieved in all patients, on average in 6.78 ± 0.37 and 9.75 ± 0.26 days, i.e., respectively. In less time than in group I patients. Patients with periodontitis, depending on the available clinical signs of the disease, required comprehensive treatment; one of its main components was surgical intervention, which was preceded by a therapeutic stage. It takes a long time to prepare a periodontitis patient for surgery, and neither the patient nor the doctor can be satisfied. In this regard, in the treatment of patients with periodontitis, it is important to reduce the time of preoperative preparation, regression of inflammatory processes in periodontal tissues, prevention of postoperative complications and recurrence of the disease. Analysis of the course of the postoperative period showed that in patients of group II, the disappearance of pain and swelling

of collateral tissues occurred after 3.2 ± 0.3 days, and in group I - after 4.7 ± 0.3 days. Healing in the area of surgical intervention in patients of group II was observed on average after 8.0 ± 0.4 days, while in patients of group I - after 10.6 ± 0.5 days. The clinical efficacy of mexidol in anti-ulcer therapy was evaluated according to the following criteria: relief of pain syndrome and dyspepsia and timing. about scarring of dyspepsia. When using Mexidol, a rapid analgesic effect was observed. After 1.54 ± 0.48 days in patients with duodenal ulcer, 1.87 ± 0.52 days in patients with gastric ulcer, the pain decreased, and after 3-4 days (on average 3.27 ± 0.35 days in patients with duodenal ulcer, 3.67 ± 0.55 days in patients with gastric ulcer) the clinical manifestations of the disease are completely They disappeared. disappeared in 94 and 92.3% of patients with both duodenal ulcer and gastric ulcer. In the treatment of patients with peptic ulcer disease, the duration of pain varied from 2 to 18 days, averaging 5.54 ± 0.84 for duodenal ulcer and 7.15 ± 0.76 for gastric ulcer, which was significantly longer than in group II receiving mexidol. In group II, the healing of ulcerative defects was observed for 12-28 days, averaging 15.87 ± 1.12 days for duodenal ulcers and 18.78 ± 1.25 days for stomach ulcers. Ulcer scarring in the comparison group occurred somewhat later, between 17.72 ± 1.37 days in duodenal ulcer and 21.55 ± 1.33 days in gastric ulcer. Complete regression of inflammatory changes in the gastric mucosa against the background of complex treatment with mexidol is achieved in 48.2% and 51.6% of patients with IBD and duodenal ulcer. % — Against the background of gastric ulcer, which is much more common than treatment involving a 7-day eradication regimen: h for duodenal ulcer in 24.4% and gastric ulcer in 32.2%. The frequency of pylori eradication (seven-day regimen) was 94.1 and 91.9%, respectively, which corresponds to the effectiveness of 14-day antimicrobial therapy regimen for duodenal ulcer and stomach ulcer. A week-long course of antibacterial therapy in combination with mexidol showed good tolerability of the course of treatment in periodontal pockets of patients with inflammatory periodontal diseases against the background of both duodenal ulcer and stomach ulcer and most patients receiving 7-day eradication therapy in combination with mexidol. Side effects were observed in 20 (13.6%) patients and in duodenal and gastric ulcer: a metallic taste in the mouth in 5 patients, headache in 4 patients associated with omeprazole, digestive disorder in 9 patients. Regression analysis of subjective and objective symptoms of periodontal diseases showed that in group II, 2 months after the start of treatment, all patients achieved remission of gingivitis and periodontitis of mild severity, remission of periodontitis of moderate and severe severity against the background of duodenal ulcer was observed in all and against the background of gastric ulcer in 32 (91.4%) patients. Conversely, in group I patients, remission of moderate and severe periodontitis was detected in 68 and 70% of patients with both duodenal ulcer and stomach and duodenal ulcer with duodenal ulcer To obtain objective information about the condition of periodontal tissues after complex treatment with mexidol, we studied the

dynamics of clinical parameters, parameters of cell regeneration, the risk of neuroendocrine and cytokine regulation. The communication status has been analyzed. According to the results of morphological analysis of gingival epithelial cells, we have established normalization of the processes of proliferation and apoptosis of gingival epithelial cells after complex treatment with mexidol (Table 1), as well as the positive dynamics of the quantitative density of immunopositive epithelial cells in relation to nitric oxide synthase and melatonin. At the same time, in the observed group of both patients with moderate and severe periodontitis, hyperplasia of immunopositive gum cells to endothelin-1 persisted after treatment (Table 2). After the application of mexidol, the number of studied neuroendocrine cells in the gastric mucosa was closest to the control values. Analysis of cytokine balance indicators showed that in group II, after 2 months of treatment, normalization of IL-6, IL-10, IL-12 and IL-18 levels in oral fluid was observed (Table 3). Then, with further follow-up of patients with inflammatory periodontal diseases and gastric ulcer treated with mexidol, after 6 months, remission of inflammatory periodontal diseases was recorded in all patients with gingivitis, and in 90.4% of patients with periodontitis, there was no recurrence of peptic ulcer disease during this period. Discussion. The high clinical efficacy of mexidol in the complex treatment of patients with inflammatory periodontal diseases on the background of peptic ulcer is associated with positive dynamics of the quantitative density of epithelial cells of the gum and stomach, immunopositive to nitric oxide synthase and melatonin, normalization of the processes of proliferation and apoptosis of epithelial cells of the gum, the content of cells and cytokines in the oral fluid, which is consistent with the data of other authors. [1,8]. Analyzing the results obtained, we can talk about restoring the balance between the aggressiveness factor and the cytoprotective properties of the periodontal and gastric mucosa, creating favorable conditions for remission of gingivitis or periodontitis and elimination of digestive defects in the gastroduodenal region. The use of mexidol in the complex treatment of patients with combined periodontics and peptic ulcer disease is recommended for patients who do not want a 14-day regimen of eradication therapy (intestinal dyspepsia, antibacterial treatment outside the underlying disease for the next 6 months) or with its side effects [9].

CONCLUSION

The presented data show that the use of mexidol in patients with inflammatory periodontal diseases against the background of peptic ulcer disease is not only aimed at achieving remission of peptic ulcer disease, but is also justified from the point of view of treatment and prevention of periodontal diseases. The use of Mexidol reduces the preoperative preparation time to 9-10 days and allows to achieve stable

remission of peptic ulcer and periodontal diseases in all patients with gingivitis and in 6% of patients with periodontitis after 90.4 months of follow-up.

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