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# TREATMENT OF PATIENTS WITH EXACERBATED GENERALIZED PERIODONTITIS AND MANIFESTATIONS OF PSYCHOEMOTIONAL STRESS

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The common etiological factor of periodontal disease is periodontopathogenic microflora. It is contained in small quantities in the human oral cavity. In the case of favorable circumstances (the presence of systemic diseases, reduced general or local resistance), it multiplies rapidly and causes periodontal disease: gingivitis or periodontitis. Among these systemic lesions the stress occupies a significant place [7-8, 15]. The presence of these systemic lesions should be considered in the comprehensive treatment of periodontal disease. Among these systemic lesions, psychological stress occupies an important place [9, 13].

The effect of psychoemotional stress on the patient's organism and periodontal tissue can be neutralized with medication. In order to prepare patients with generalized periodontitis with manifestations of psychoemotional stress, a set of drugs has been proposed: zoxone (0.002 g once a day), nicergoline (0.005 g 3 times a day), sibazone (0.005 g once a day) [4-5]. Experimental biochemical and pathohistological studies show the periodontal-protective effect of the proposed drug complex [2-3] and substantiate its use in clinical settings. Given the more pronounced manifestations of psychoemotional stress in patients with exacerbative generalized periodontitis in the case of this complex for the treatment of patients with exacerbative generalized periodontitis 2 times increased doses of nicergoline (0.01 g 3 times a day) and sibazone 0 (0, 01 g 3 times a day).

Aim of this study was to determine the nearest results of clinical efficacy of the modified proposed complex of adrenoblockers in the complex treatment of patients with generalized periodontitis of exacerbative course in the presence of psychoemotional stress.

**Material and methods.** This clinical study was conducted in a group of 70 patients with generalized periodontitis of I-II stage, exacerbative course and manifestations of psychological stress. The main group consisted of 40 patients, in the control group of comparison there were 30 patients.

In the complex treatment of patients of the main group used a modified enhanced complex of adrenoblockers to suppress the manifestations of psychological stress. Patients in the control group were treated similarly to patients in the main group, but without the use of a modified complex of adrenoblockers.

The level of psychological stress was assessed using questionnaires (DASS-21; Spielberger-Khanin). [9]. Subjects completed the Spielberger-Khanin questionnaire, which is used to determine personal and situational anxiety. Subsequently, the answers were evaluated according to the keys and the total number of points was calculated for

all judgments separately on each of the scales (situational anxiety and personal anxiety).

Patients with generalized periodontitis were carefully removed all dental plaque and deposits with irrigation of periodontal pockets with 0.5% chlorhexidine solution. Subsequently, the subgingival surfaces of the tooth roots were thoroughly cleaned with the removal of softened cementum and dentin (so-called SRP therapy). Drug treatment of symptomatic gingivitis was performed according to its form - the exacerbative course of catarrhal gingivitis is the same in patients of both groups. The presence of inflammation in the gingiva was detected and assessed using the Schiller-Pisarev test (1962) and the PMA index according to C. Parma [11]. The state of oral hygiene was assessed using the OHI-S index [8] and the O'Leary index [12], the assessment of the level of gingival bleeding by the PBI probing bleeding index [10]. In general, the condition of the periodontium was assessed using the periodontal index (PI) by A.L. Russel [14]. The diagnosis of periodontal disease was established according to the classification of N.Danilevsky [1]. The obtained results were processed by statistical methods using personal computers.

**Results and discussion.** The effectiveness of the treatment led to a significant improvement in the hygienic condition of patients in both groups. This was confirmed by the improvement of the hygienic index OHI-S in 3.52 times from  $1.83 \pm 0.13$  points to  $0.52 \pm 0.05$  points. The obtained values of the hygienic index testified to the achieved good hygienic level of the oral cavity.

In general, in patients of the control group, the hygienic index decreased 2.19 times from  $1.73 \pm 0.17$  points to  $0.79 \pm 0.07$  points. The resulting condition of the oral cavity also corresponds to a good hygienic level of the oral cavity. These hygienic indices in their value in patients of the main and control groups differed ( $p < 0,05$ ) statistically significantly.

The improvement of the hygienic condition of the oral cavity was also evidenced by the data of the O'Leary periodontal index. The treatment led to a decrease in the values of this index in patients of both groups. In general, patients in the main group showed a decrease in the value of the O'Leary periodontal index in 4.92 times from  $60.33 \pm 5.4\%$  to  $12.25 \pm 0.91\%$ . Thus, in the control group, the value of the O'Leary index was reduced 4.29 times from  $68.34 \pm 6.2\%$  to  $15.9 \pm 0.13\%$ . The values of O'Leary periodontal index in patients of the main and control groups were statistically significant ( $p < 0,05$ ).

After the course of treatment, the gingival mucous membrane was pale pink, almost no bleeding during brushing and probing. There were no dental deposits and plaques on the teeth. Patients had significantly reduced pathological mobility of the teeth. Only 7 (30.44%) of 23 patients with stage II disease had mobility of the lower front teeth of grade I. Inflammation in the gingiva according to the Schiller-Pisarev test was absent in 82.35% of patients. In numerical terms, the value of this sample (iodine number by Svrakov) in patients of the main group decreased 2.23 times from  $2.79 \pm 0.28$  before treatment to  $1.25 \pm 0.09$  after treatment ( $p < 0.05$ ). In patients of the control group, it decreased by 1.84 times and was  $2.89 \pm 0.27$  before and  $1.57 \pm 0.09$  ( $p < 0.05$ ) after treatment. The obtained data were statistically significantly different ( $p < 0.05$ ).

To quantitatively comparing the level of gingival inflammation, the PMA index was used. In patients of the main group, the PMA index decreased 6.41 times from  $76.3 \pm 2.7\%$  and amounted to  $11.9 \pm 0.77\%$ . In the control group, the value of the PMA index was reduced 5.78 times from  $81.2 \pm 3.51\%$  to  $14.05 \pm 0.98\%$ . The values of the PMA index of patients in the main and control groups were statistically significantly different ( $p < 0.05$ ).

The complex treatment led to a decrease in the level of gingival bleeding, as evidenced by the value of the PBI index. In patients of the main group, the PBI index decreased 3.66 times from  $2.71 \pm 0.19$  points to  $0.74 \pm 0.07$  points. In the control group, the value of the PBI index was reduced by 3.09 times: - from  $2.75 \pm 0.19$  points to  $0.89 \pm 0.08$  points.

The general condition of the periodontium can be assessed using the periodontal index (PI). There are some positive changes in the PI index after treatment: in patients of the main group, the PI index decreased 3.85 times from  $2.65 \pm 0.5$  to  $0.68 \pm 0.05$  points. In patients of the control group the value of the periodontal index decreased 3.52 times from  $2.78 \pm 0.47$  to  $0.79 \pm 0.08$  points. These values of the periodontal index in patients of the main and control groups were statistically significant ( $p < 0.05$ ).

**Conclusion.** Thus, the obtained clinical and laboratory results of examination of patients in the nearest terms of observations indicate the clinical effectiveness of the complex of adrenoblockers for the treatment of patients with generalized periodontitis with manifestations of psychosomatic stress.

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