THE VALUE OF MICROCIRCULATION BY DYNAMIC IN TREATMENT OF INFLAMMATORY PERIODONTAL DISEASES

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The deterioration of the microcirculation of periodontal tissues is an important link in the chain of pathogenesis of inflammatory periodontal diseases.
Factors ensuring the constancy of hemodynamics are among the ones determining the occurrence and course of pathological processes.

On the basis of clinical and functional observations, to study the diagnosis effectiveness of microcirculatory parameters in the dynamics of the analysis of the treatment effectiveness of inflammatory periodontal diseases.

67 patients whom are diagnosed with chronic generalized periodontitis of moderate severity, were divided into two groups: main (34) and control (33). Patients underwent (1) SRP with treatment of periodontal pockets by ozono-oxigen through gaseous form (2) SRP using local antiseptics. At all stages, the clinical evaluation of periodontal tissue was assessed by determining the indices (OHI-s, PMA, PI, CPITN, PBI), CBCT and microcirculation of periodontal tissues at all stages of treatment. The study was performed by ultrasound dopplerography using the Minimax-Doppler-K device (OOO SP Minimax, St. Petersburg).

The linear velocity of the blood flow (Vam) is the most important diagnostic criterion of microcirculatory disorders in periodontal tissues according to the correlation relationships of the hemodynamic parameter. The parameter (Vam) in the main group was 0.7802 ± 0.1301 at the initial week 0.5301 ± 0.2172 cm / sec, while in the control group it was at the initial 0.5241 ± 0.2432 cm / sec after treatment, the analogous index was 0.6102 ± 0.1421 cm / sec.

The use of the velocity characteristics of the tissue blood flow allows the diagnose of hemodynamic changes in periodontal tissues. The method of ultrasonic dopplerography allows assessing the state of the microcirculatory bed under dynamic observation. After ozone therapy, the periodontal microcirculation state according to Doppler ultrasound has improved by 30%, which proves its positive effect on hemodynamics.