The Preparation "Stomotofit (Dentosept)" and its Use for the Combined Treatment of Parodontitis

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The aggressive nature of the microbes that populate the oral cavity give constant rise to the need for better protection against their effects, leading to the search for and development of new antibacterial preparations. (*Dmitrieva 1997*) Among the numerous preparations presently existing, those with pronounced antiseptic effects are preferred, since bacterial strains develop resistance to these preparations more slowly than to antibiotics and they are less likely to provoke allergic reactions. (*Brune 1997*)

The purpose of the present study was to evaluate the effectiveness and safety of the herbal preparation "Stomotofit" for the treatment of inflammatory paradontose infections.

The preparation "Stomotofit" is a composition of 7 different herbal ingredients: Quercus cortex (oak bark); Matricariae flores (camomille flowers); Salviae folia (sage leaves); Arnicae herba (arnica); Thymi herba (thyme); Menthae piperitae herba (peppermint); Calami rhizomata (Calamus roots). The pharmacological effects of this preparation are anti-inflammatory, antiseptic and astringent.

"Stomotofit" was used to treat 45 patients between the ages of 19 and 27, 38 of whom were suffering from gingivitis and 7 of whom were suffering from gingivitis in combination with localized parodontitis of a mild form. Their clinical status was evaluated based on the grounds of extensive examinations, subjective reports of the patients themselves, an assessment of their index of hygiene (API) and based on their parodontal-marginal-alveole index (PMA). "Stomotofit" was applied over a period of 14 days, 2–3 times a day in the form of a hygiene mouth-wash used after meals. Preliminary to this each patient underwent a professional hygienic treatment of the oral cavity (removal of supra- and subgingival dental calculus, grinding and polishing of dental surfaces). All patients were instructed in correct techniques of dental hygiene. In the wash-off from the gingival groove the quantity of C-reactive protein (CRP) and antistreptolisine–O (ASL-O) was evaluated.

Microbiological tests were conducted using standard methods that evaluate the quantitative and qualitative structure of the general microbe population in the oral cavity (OMO) and in the mucous membranes of the intergingival cavities.

In addition, the effects of the biologically active solution "Stomotofit" on the processes of active cell division of immunocompetent cells (IC) in human blood were studied in vitro. The

intensity of proliferative reactions of IC was assessed according to DNA synthesis activation, measured with regards to the rate of 3H-timidin integration into newly synthesised DNA.
An analysis of the results obtained from examinations of the patients showed that during the initial examination of the oral cavity the clinical indexes corresponded to: API – 96%; PMA – 2,5; SBI – 86%. Additional treatment significantly improved the patients' condition, reduced the API index to 30%, and the PMI index to 0.9–1.0, bleeding was virtually absent. An inflammation of the gingival edges could not be visually discerned, the gums were of a pale pink colour and were firmly attached to the base of the teeth.
The autoflora of the biotopes under study in the oral cavity before treatment using "Stomotofit" showed that in 25% of the subjects strains with a potential pathogenic nature were vegetating (Staph. aureus, E. coli, Candida albicans). In general this was identified in patients suffering from gingivitis in combination with mild forms of parodontitis. At the same time, the seeding potential of lactoflora was determined to be at the lower end of titration.
14 days after beginning treatment with "Stomotofit", in most cases, the autoflora in the oral cavity corresponded to physiological norms. To a lesser degree the lactoflora population was stabilised.
An overall correlative connection between clinical and microbiological values was determined.
The CRP and ASL-O quantities in the gingival fluid were significantly reduced (by 2 to 8 times). An investigation of the effects of the biologically active solution "Stomotofit" on the activation processes of human T-lymphocytes in vitro showed that this solution within a wide spectrum of concentrations (0.006 to 0.15%) affects the proliferation processes of immunocompetent cells.

Conclusion

When summarizing the results of this study, it should be noted that the preparation "Stomotofit” (Dentosept) possesses marked therapeutic antiinflammatory properties. This determines its perspective application for complex treatment and prevention of gingivitis and parodontitis. In addition, the preparation may be used for the decontamination of the oral cavity before carrying out various therapies to treat stomotological diseases of the oral mucous membranes. It may also be used as an immunomodulating preparation.
"Stomotofit (Dentosept)" is easy to use and highly valued by patients. No adverse effects have been seen.