



Application of Haemostat Gel in the Complex Treatment of Severe Periodontitis

1. **Abdukholikov Sirojiddin Fakhridin ugli**
2. **Gaffarov Sunnatullo Amrullaevich**

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Abstract: As it is known, in terms of treatment of periodontal diseases, the choice of drugs applied topically plays an important role, since the lack of effectiveness of many of them is associated with a change in the varulence of the microflora of dental pockets and with the emergence of microorganisms resistant to antibiotics and antiseptics.

Keywords: periodontitis, haemostat gel, resistance to antibiotics and antiseptics.

¹ Basic doctoral student, Tashkent State Dental Institute

² Doctor of Medical Sciences Professor, Head of the Department of Stomatology, Pediatric Dentistry and Orthodontics, Centre for the Development of Professional Qualification of Medical Workers

Introduction. On the basis of clinical and functional studies, it was found that the newly developed phytopreparation haemostat gel has the most positive effect than traditional treatment. At the same time this phytopreparation has expressed anti-inflammatory, styptic and gingival capillary wall strengthening actions. As new data on etiological and pathogenetic mechanisms of inflammatory processes in the periodontium are obtained, new treatment methods and preparations, especially phytopreparations, are being developed [5].

In recent years, the use of medicinal preparations of plant origin has attracted much attention [1].

One of them is a newly developed phytopreparation Haemostat gel based on local plant material [2,4]. This preparation has pronounced analgesic, anti-inflammatory, styptic and keratoplastic effects. It is available in the form of gel, film, tablet and spray. It is made on the basis of local medicinal plants - Polygonum hydropiper L. (achchik taron), Polygonum aviculare L. (kizil toron) and Urtica L. (ikki uili gazanda). It contains flavonoids, macro and micro elements, astringents and vitamin K.

Purpose of the study: clinical trial of haemostat gel in the complex treatment of chronic generalised periodontitis of severe severity.

Material and methods of research: 100 patients aged from 30 to 60 years were under our observation, among them men - 46, women - 54. Selection of patients for clinical study of the

preparation haemostat gel was carried out taking into account the same subjective and objective signs of the studied disease (the main group of the examined).

The method of application was as follows: sanation of the oral cavity, treatment of the oral cavity with an antiseptic solution (0.02% chlorhexine solution), leaving haemostat gel on the gums under a protective dressing for 20 minutes. Application of gums with haemostat gel was carried out 2-3 times a day. The effectiveness of haemostat gel was evaluated by subjective sensations of patients, according to objective and additional methods of research before and after treatment: hygiene index (HI), PMA index, vacuum test (according to Kulazhenko).

The obtained results were compared with the data in the control group of 100 patients identical in age, diagnosis and severity of the disease, who underwent traditional treatment (oral cavity sanation, oral cavity treatment with 0.02% chlorhexidine solution and gum application with cholisal gel).

Results and their discussion: Clinical studies showed that in patients who received haemostat gel the therapeutic effect was manifested already at 2-3 sessions of treatment: bleeding and soreness of gums, burning and rubbing sensation decreased sharply. Persistent therapeutic effect was confirmed by objective studies (table).

The results of clinical and functional studies show that the oral hygiene index in the patients of the main group improved almost 2 times more than in the control group of subjects (respectively 2.2 and 1.1) after the course of treatment. The PMA index in the group of patients with chronic generalised periodontitis who received haemostat gel inflammatory changes in periodontal tissues after treatment decreases by 47.5%. At the same time in the group of patients who received traditional treatment this index is equal only by 16.1%, i.e. almost 3 times less. In the main group of patients the resistance of gingival capillaries (vacuum test) after treatment with haemostat gel strengthens for 36 sec more than the similar index in the control group of the examined patients (20 sec), i.e. 11 sec faster.

Table1

Patient group	Study periods		IG	PMA (%)	Vacuum test (c)
Main	1	before treatment	3,8±0,3	78,4±3,1 ^x	18 ± 1,4
	2	after treatment	1,6±0,08 ^{*x}	26,9±2,2 ^{*x}	56 ± 2,5 ^{*x}
Control	1	before treatment	3,7±0,4	66,5±2,8	16 ± 1,2
	2	after treatment	2,6±0,2 ^{***}	48,4±1,9 ^{**}	32 ± 1,8 [*]

Note: * - reliability of differences in relation to pre-treatment (* - P<0.05; ** - P<0.01; *** - P<0.001); x - in relation to the control group (x - P<0.05; xx - P<0.01; xx - P<0.001).

This indicates that the traditional approach with the use of 0.02% chlorhexidine solution and gum applications with cholisal gel in the treatment of chronic generalised periodontitis of severe degree is not optimal and has a number of disadvantages in the form of insufficient clinical effectiveness and patients' dissatisfaction with the comfort of use. And the use of haemostat gel allowed to achieve greater clinical efficacy in the form of decreasing the terms of periodontal pathological process cure and absence of complications development.

Conclusions: Thus, the conducted clinical and functional studies indicate significant effectiveness of topical application of haemostat gel in the complex treatment of chronic generalised periodontitis with severe severity than traditional treatment with chlorhexidine and cholisal. In this case, this phytopreparation has a pronounced anti-inflammatory, styptic and strengthening the capillary walls of the gingiva actions. Allergic reactions and side effects when using haemostat gel were not observed. The greater effectiveness of haemostat gel compared to commonly known antibacterial and anti-inflammatory agents was determined, which allows us to recommend it for widespread clinical use.

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