WEB OF SCIENTIST: INTERNATIONAL SCIENTIFIC RESEARCH JOURNAL
ISSN: 2776-0979, Volume 3, Issue 1, Jan., 2022

CLINICAL AND BIOCHEMICAL EVALUATION OF THE EFFECTIVENESS OF COMPLEX TREATMENT OF CATARRHAL GINGIVITIS DISEASES WITH A HERBAL PREPARATION, INFUSION OF "CLOVE TREE"

Shirinova M.G.
Samarkand State Medical Institute

Rizayeva M.O.
Samarkand State Medical Institute

Makhmudova M.M
Samarkand State Medical Institute

Abstract
Catarrhal gingivitis is a periodontal disease characterized by serous (catarrhal) inflammation of gums. Local changes in catarrhal gingivitis include edema, hyperemia (or cyonoticity) of the gingival mucosa, soreness and bleeding margin, the presence of dental plaque, and an upleasant taste in the mouth.
It is very important at an early stage in the development of inflammatory periodontal diseases to achieve a persistent and long term effect and prevent the development of destruction processes in the periodontal tissues. Since already at a young age, due to the influence of various factors in the oral cavity, there are initial manifestations of periodontal inflammation.

Keywords: catarrhal gingivitis, periodontal disease, complex treatment, herbal infusion, "Clove tree".

Introduction

In practical dentistry, complex treatment of inflammatory and destructive periodontal diseases is most often carried out with the use of antibacterial agents. However, their long-term, uncontrolled use leads to numerous complications: drug tolerance, weakening of the therapeutic effects, dysbiosis of the oral cavity and gastrointestinal tract and etc. Such complications can be avoided by using homeopathic remedies. The most promising today is the use of herbal preparations. Herbal preparations have a mild, regulating, normalizing effect. They are easily absorbed, non-toxic, do not couse side effects and allergic reactions.

WEB OF SCIENTIST: INTERNATIONAL SCIENTIFIC RESEARCH JOURNAL
ISSN: 2776-0979, Volume 3, Issue 1, Jan., 2022

The Aim of Study- is to evaluate the effectiveness of the use of a new generation of phytopreparations from the herbal infusion of the Clove tree in the complex treatment of catarrhal gingivitis in young patients.

Research Objectives

1. To study the dynamics of clinical changes in the state of the gums in young patients before, during and after the application of the infusion of "Clove tree" in the complex treatment of catarrhal gingivitis;
2. To study the activity of the enzymes glutathione peroxide, superoxide dismutase alanine aminotransferase, aspartate aminotransferase, lactate dehydrogenase and alkaline phosphatase in mixed saliva in young patients before, during and after the application of the infusion of "Clove tree";
3. To propose an optimal scheme for the complex treatment of young patients with inflammatory periodontal diseases of an herbal preparation, an infusion of "Clove tree";

Research Materials

Young patients with catarrhal gingivitis (40 patients). All examined patients were devided into two groups, depending on the treatment. All patients participating in our study were examined using basic (clinical) and additional (paraclinical) methods. The main (clinical) methods of examination of the patients included the collection of anamnesis of the disease and life of the subject, examination and assessment of this periodontal status. Of the additional methods of examining patients, biochemical (laboratory), functional (assessment of the state of the microvasculatory of the gums) and X-ray were used. One group underwent a standart method of treating catarrhal gingivitis, the other a complex treatment with the addition of a herbal infusion "Clove tree".

Research Methods

1. Clinical examination
2. Biochemical examination
3. Statistical data processing

Reaserch Results

Our studies revealed that the GPO activity in the SS in Patients with CG of both groups was 10.73 ± 0.19 IU / ml and 10.7 ± 0D7 IU / ml, respectively. This significantly exceeded the activity of GPO in the SS in patients of the control group. GPO appears

in the SS only with bleeding of the gums, therefore in t he control group in payients with a healthy periodontal condition, the GPO activity was low – 0.34 ± 0.03 IU / ml, which is consistent with other authors.

In patients with CG og the comparison group, the decrease in GPO activity was on average 17.75%, which, as in the patients of the main group, reflected in the clinical state, however in this case, it did not reach control group.

Thus, our study of the results of treatment of patients with CG indicates that professional oral hygiene, supplemented by correctly performed individual hygiene measures, is not enough for long-term and persistent relief of the symptoms of the disease. The use of herbal preparations the infusion of “Clove tree” provided a pronounced and persistent therapeutic effect for a long time.

Conclusion

Compherensive examination of the periodontal condition in patients aged 18 to 44 years, including the determination of dental indices and indicators of mixed saliva, revealed periodontal pathology in 80%. The clinical effect of the complex application of the Clove tree infusion is confirmed by a decrease in the activity of lactate dehydrogenase in mixed saliva in patients with catarrhal gingivitis (from 133.2 ±4.68 IU / l to 102.9 ± 5.13 / IU /l) and a decrease in activity alanine aminotransferase, aspartate aminotransferase and alkaline phosphatease in the mixed saliva of the patients of the main group to the values in the control group 30 days after the start of treatment.

Significant decrease in the amount of lactoferrin in mixed saliva in patienys with chronic generalized catarrhal gingivitis 8.81 ± 0.54 ng / L to 2.88 ± 0.51 ng / L and from 7.94 ± 0.41 ng / L to 2.86 ± 0.49 ng / L, respectively confirms the anti-inflammatory effect of the infusion “ Clove tree”.

Bibliography

1. Fine D.H., Furgang D., Sinatra K., Charles C., McGuire A., Kumar L.D. In vivo antimicrobial effectiveness of an essential oil-containing mouth rinse 12 h after a single use and 14 days' use // J. Clin. Periodontal. 2005 Apr; 32(4):335-40.
2. Gleissner C., Glatzel H., Kempski O. et al. Gingival microcirculation in acute and chronic gingivitis // J. Dent. Res. - 1998. - V. 77 (IADR Abstract). - P. 993.
3. Gold L., Nazarian L.N., Johar A.S., Rao V.M. Characterization of maxillo-facial soft tissue vascular anomalies by ultrasound and color Doppler imaging: an adjuvant to computed tomography and magnetic resonance imaging //J. Oral. Maxillofac. Surg. - 2003. -N. 61 (1). -P. 19-31.

4. Greenstein G., Poison A. The role of local drug delivery in the management of periodontal diseases: a comprehensive review. //J. Periodontol.- 1998.- Vol. 69, № 5.- P. 507-520
5. Gunsolley J.C. Uncontrolled randomized clinical trial demonstrates similar long-term (6 months) antigingivitis and antiplaque efficacy for 2 mouth rinses: one that uses cetylpyridinium chloride (CPC) as an active agent and the other that uses essential oils (EO) as an active agent // J. Evid. Based. Dent. Pract. 2008 Jun; 8(2):85-6.
6. Guggenheimer J. Oral manifestations of drug therapy.// Dent. Clin. North. Am. 2002 Oct; 46(4):857-68.
7. Hu C.Z., Jin H.L., Liang J.P., Chu M., Guo J.Z., Lu Z., Sheng Q.P., Cai
8. Z.W. Analysis for clinical effect of a rinse containing cetylpyridinium chloride in treatment of gingivitis and periodontitis // Shanghai Kou Qiang Yi Xue. 2003 Dec; 12(6) :414-8.
9. Imamura N., Nakata S., Nakasima A. Changes in periodontal pulsation in relation to increasing loads on rat molars and to blood pressure // Arch. Oral. Biol. - 2002. -N,47 (8). - P. 599-606.
10. Khalessi A.M., Pack A.R., Thomson W.M., Tompkins G.R. An in vivo study of the plaque control efficacy of Persica: a commercially available herbal mouthwash containing extracts of Salvadora persica. // Int. Dent. J. 2004 Oct; 54(5):279-83.
11. Kozlovsky A., Goldberg S., Natour I., Rogatky-Gat A., Gelernter I., Rosenberg M. Efficacy of a 2-phase oil: water mouthrinse in controlling oral malodor, gingivitis, and plaque. // J. Periodontol. 1996 Jun; 67(6):577-82.
12. Listgarten M.A. The role of dental plague in gingivitis and periodontis // J. Clin. Periodontol. 1999. № 15. - P. 485-487
13. Matsuki M., Xu Y.B., Nagasawa T. Gingival blood flow measurement with a non-contract laser flowmeter // J. Oral. Rehabil. - 2001 Jul. - N 28 (7). -P. 630-633.
14. Mavropoulos A., Aars A., Brodin P. The involvement of nervous and some inflammatory response mechanisms in the acute snuff-induced gingival hyperaemia in humans // J. Clin. Periodontol. - 2002 Sep. - N 29 (9). - P.855-864.
15. Modesto A., Lima K.C., de Uzeda M. Effects of three different infart dentifrices on biofilms and oral microorganisms // J. Clin. Pediatr. Dent. - 2000.Yo. 24, 1163.-P. 237-243.