



PHYSIOTHERAPY IN THE COMPLEX TREATMENT OF CHRONIC GINGIVITIS

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Abstract. Periodontal diseases occur in all age groups, including young people and even children, which contributes to the formation of the "unhealthiness" of the nation. Signs of periodontal tissue damage appear already in 6-7-year-old children, by the age of 15 more than half of adolescents are registered, and in the adult population their prevalence reaches 85-100%. It should be emphasized that with inflammatory periodontal pathology in humans, the quality of life deteriorates in proportion to the activity of the inflammatory process. The mucous membrane of the oral cavity is adapted to constant contact with a variety of microflora and is resistant to various stimuli, to contact with the flora-rich oral cavity.

Keywords: chronic gingivitis, physiotherapy, periodontal disease, therapeutic and preventive measures.

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ФИЗИОТЕРАПИЯ В КОМПЛЕКСНОМ ЛЕЧЕНИИ ХРОНИЧЕСКОГО ГИНГИВИТА

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Аннотация. Заболевания пародонта встречаются во всех возрастных группах, в том числе у молодых людей и даже детей, что способствует формированию «нездоровья» нации. Признаки поражения тканей пародонта проявляются уже у 6–7-летних детей, к 15 годам регистрируются более чем у половины подростков, а у взрослого населения их распространенность достигает 85–100%. Необходимо подчеркнуть, что при воспалительной патологии пародонта у человека происходит ухудшение качества жизни пропорционально активности воспалительного процесса. Слизистая оболочка полости рта приспособлена к постоянному контакту с разнообразной микрофлорой и устойчива к воздействию различных раздражителей, к контакту с богатой флорой полостью рта.

Ключевые слова: хронический гингивит, физиотерапия, парадонт, лечебно-профилактические мероприятия.

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THE RELEVANCE

Dental diseases are a risk factor for the development of a number of somatic pathologies. Therefore, the health of the oral organs, starting from childhood, is an integral part of the overall human health. Periodontal diseases have been and remain one of the most common dental diseases and have a close connection with the state of the digestive tract, metabolism, cardiovascular and endocrine systems, forming the background for the sensitization of the body [1,5].

The main etiological factor of diseases of the marginal periodontal are plaque microorganisms. Gingivitis, therefore, is a disease associated with the penetration of a microbial agent into the periodontal tissues, triggering an immune response

in the body and requiring not only local exposure to the periodontal [2].

Chronic gingivitis is common in adolescents and young people. The relevance of the search for new methods of symptomatic treatment of gingivitis is due to the social significance of this disease, the progression of which with age leads to the destruction of periodontal tissues, loss of teeth and contributes to the development of somatic pathologies [4,6]. Physical methods and technologies have opened up new possibilities in the treatment of inflammatory periodontal diseases.

The purpose of this work was a clinical study of the use of visible light radiation of the red and green spectra in adolescents and students with chronic gingivitis.

MATERIALS AND METHODS

30 patients aged 16-23 years with chronic catarrhal gingivitis without general somatic diseases were under observation. As a control group, 15 people of the same age group with intact periodontal disease were examined.

The clinical assessment was carried out on the basis of patient complaints, examination and dynamics of the generally accepted index assessment of the condition of periodontal tissues. The Green-Vermillion hygiene index, Muhlemann-Son bleeding index, PMA inflammation index in Parma modification were determined [3]. For LED photochromotherapy, the device "Spectrum LC-2" was used. Noninvasive red and green LED matrices were used during irradiation. The irradiation was carried out sectorially in the projection area of the upper and lower jaw with an exposure of 3 minutes, power 75%, frequency 70 Hz, constant mode. The course of treatment consisted of 8 daily procedures, of which the first four procedures used red light, subsequent procedures — green light [7].

RESULTS

In a clinical study, the positive therapeutic effect of the use of physiotherapy was noted primarily on the basis of subjective feelings of patients, as well as a comparative analysis of the dynamics of generally accepted indices.

In the main group, the following dynamics were observed: before the start of treatment, $IG=2.02\pm 0.1$; $IR=1.45\pm 0.2$; $PMA=13.2\pm 1.43\%$ and, respectively, at the end of the course: $IG=1.02\pm 0.2$; $IR=1.02\pm 0.2$; $PMA=0.8\pm 1.2\%$. In patients with intact periodontitis, $IG=0.85\pm 0.07$, which corresponded to a good level of hygiene; $IC=0$, $pmA=0$, which indicated the absence of inflammation in the gums.

The positive therapeutic effect of the use of physiotherapy contributed to the formation of psycho-emotional comfort. Patients noted the convenience and ease of use of the device, since the matrices did not come into contact with inflamed gums, and the total exposure was 12 minutes. The risk of allergic reactions was excluded [8].

CONCLUSIONS

The use of physiotherapy in the treatment of chronic catarrhal gingivitis allows for a short time, without complications and pain, to achieve a positive therapeutic effect, which allows us to recommend this method of treatment for the practical work of a periodontist.

CONFLICT OF INTERESTS

The authors declare the absence of obvious and potential conflicts of interest related to the publication of this article.

SOURCES OF FUNDING

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AVAILABILITY OF DATA AND MATERIALS

All data generated or analysed during this study are included in this published article.

AUTHORS' CONTRIBUTIONS

All authors contributed to the design and interpretation of the study and to further drafts. All authors read and approved the final manuscript.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

All applicable international, national, and/or institutional guidelines for the care and use of animals were followed.

CONSENT FOR PUBLICATION

Not applicable.

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КОНФЛИКТ ИНТЕРЕСОВ

Авторы заявляют, что данная работа, её тема, предмет и содержание не затрагивают конкурирующих интересов.

ИСТОЧНИКИ ФИНАНСИРОВАНИЯ

Авторы заявляют об отсутствии финансирования при проведении исследования.

ДОСТУПНОСТЬ ДАННЫХ И МАТЕРИАЛОВ

Все данные, полученные или проанализированные в ходе этого исследования, включены в настоящую опубликованную статью.

ВКЛАД ОТДЕЛЬНЫХ АВТОРОВ

Все авторы внесли свой вклад в подготовку исследования и толкование его результатов, а также в подготовку последующих редакций. Все авторы прочитали и одобрили итоговый вариант рукописи.

ЭТИЧЕСКОЕ ОДОБРЕНИЕ И СОГЛАСИЕ НА УЧАСТИЕ

Были соблюдены все применимые международные, национальные и/или институциональные руководящие принципы по уходу за живот-

ными и их использованию.

СОГЛАСИЕ НА ПУБЛИКАЦИЮ

Не применимо.

ПРИМЕЧАНИЕ ИЗДАТЕЛЯ

Журнал "Интегративная стоматология и челюстно-лицевая хирургия" сохраняет нейтралитет в отношении юрисдикционных претензий по опубликованным картам и указаниям институциональной принадлежности.

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REFERENCES / ЛИТЕРАТУРА

1. Therapeutic dentistry. Textbook / Borovsky E. V., Ivanov V. S., Maksimovsky Y. M., Maksimovskaya L. H. — Moscow: Medicine, 2002 — 736 p.
2. Isakova M.K., Muradova N.M. Comparative evaluation of the treatment of inflammatory periodontal diseases in young people // Bulletin of KazNMU. - 2016. — No. 4. — pp.149-155.
3. Clinical recommendations (treatment protocols) for the diagnosis of gingivitis. Approved by Resolution No. 15 of the Council of the Association of Public Associations "Dental Association of Russia" dated September 30, 2018.
4. Mikhalchenko V.F., Mikhalchenko D.V., Fedotova Y.M., Dimitrova M.S., Veremeenko T.V. Clinical efficacy of LISTERINE mouthwash in complex hygienic oral care // Modern problems of science and education. — 2016.
5. Tsimbalistov A.B., Robakidze N.S. Pathophysiological aspects of the development of combined pathology of the oral cavity and gastrointestinal tract // Dentistry for everyone. - 2005. — No. 1. — pp.57-59.6.
6. Korostelev A. A., Te E. A., Kiseleva E. A. Scheme of complex treatment and prevention of chronic catarrhal gingivitis // Medicine in Kuzbass. —2005. — №4.
7. Lukinykh L.M., Uspenskaya A.O. Physiotherapy in the practice of therapeutic dentistry. — Nizhny Novgorod region: textbook, 5th ed. — 2011. — No. 34. — pp.12-18.
8. Korostelev A. A., Te E. A., Kiseleva E. A. Scheme of complex treatment and prevention of chronic catarrhal gingivitis // Medicine in Kuzbass. -2005. — No. 4. — pp. 86-88