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Research Article

NEW APPROACHES IN COMPREHENSIVE TREATMENT OF CHEILITIS IN PATIENTS WHO HAVE SURVIVED CORONAVIRUS INFECTION

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ABSTRACT

The article presents the clinical experience of diode laser application in the complex treatment of exfoliative cheilitis in patients with coronavirus infection. It was found that a more pronounced anti-inflammatory effect was noted in the patients of the main group, where the diode laser was included in the treatment scheme, which is expressed in the elimination of the inflammatory reaction of the mucous membrane in a shorter time than in the patients of the control group.

The study showed that the use of diode laser helps stimulate the regeneration of the mucous membrane in the lesion and can significantly improve the effectiveness of complex therapy, which is reflected in reduced pain, accelerated epithelialization, increased duration of remission and reducing the number of relapses.

KEYWORDS

exfoliative cheilitis, diode laser, new coronavirus infection COVID-19.

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INTRODUCTION

A large number of studies conducted around the world over the past two years have shown that due to the spread of the new coronavirus infection, the number of diseases of the oral mucosa caused by COVID-19 is steadily increasing. Coronavirus can cause not only pneumonia, but also affect the mucous membrane of the oral cavity.

The pathogenic agent enters the body thanks to angiotensin-converting enzyme 2, which is localized both on the surface of the alveoli and pulmonary structures, and on the epithelial cells of the oral cavity, where it begins to actively multiply. There are publications in the literature that more than 80% of patients who have suffered coronavirus infection note changes in the oral mucosa in the form of dryness and damage to the lips.

Xerostomia can be caused both by taking medications and by the influence of aggravated systemic diseases. More than 500 medications can cause xerostomia. According to researchers, post-Covid syndrome is a fairly broad diagnosis with psychophysiological consequences. A separate code has appeared in ICD-10 to describe post-Covid syndrome (U09.9).

Psycho-emotional disturbances (usually in the form of increased personal anxiety, sleep disorders, anger, autonomic disorders, asthenic syndrome with emotional lability), which occurs against the background of the COVID-19 pandemic, significantly affect not only the quality of life of patients who have had COVID-19, but and is a predictor of disease. In this connection, the dynamics of the occurrence and development of diseases, in the etiology of which the main factor is neurogenic nature, is increasing. Such diseases include cheilitis. According to domestic and foreign literature, lip diseases are relatively common and are an important problem in modern dentistry, since their diagnosis poses significant difficulties, and the treatment of this pathology is not always successful.

The most common are inflammatory and destructive diseases, such as meteorological, exfoliative, actinic cheilitis and chronic lip fissures. Being under the constant influence of external and internal factors, the red border of the lips is the site of manifestation of various diseases, including dermatoses. In addition, the mucous membrane of the red border of the lips can be subject to all sorts of inflammatory processes, undergoing various transformations, which, in turn, leads to significant difficulties in making a diagnosis.

Exfoliative cheilitis K13.0 is a chronic disease of the red border of the lips, characterized by a complex and not fully understood etiopathogenesis, a variety of trigger factors and the often insufficient effect of the therapy used. Exfoliative cheilitis was first described in 1922. by French scientists Mikulic and Kümmel as “persistent peeling of the lips.”

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Most researchers believe that neurogenic factors underlie the disease. Patients suffering from it experience a more or less significant functional disorder of the nervous system. Various allergens, both endogenous and exogenous, can also be factors that support and aggravate the disease. In patients with exfoliative cheilitis, various types of psycho-emotional disorders, anxiety reactions, and depressive states have been identified. There is evidence of the possible role of immunological factors in the pathogenesis of the disease.

In addition, the presence of dry mucous membranes and a decrease in the amount of saliva affects the development of the disease, since in this case the balance of oral microorganisms is disrupted. Patients lick their lips more often, resulting in a red border of the lips cracks and peels. The disease negatively affects the aesthetic qualities of the patient, leading to serious psychological and social disorders due to cosmetic defects. Treatment of lip diseases is one of the difficult tasks of modern dentistry.

Based on an analysis of literature sources by domestic and foreign authors devoted to the study of the condition of the red border of the lips and treatment methods, it can be concluded that existing approaches to the treatment of this pathology are not effective enough. Despite advances in pharmacology, the effectiveness of most drugs and treatment methods remains unsatisfactory.

Currently, there is no single universal approach to the treatment of cheilitis and most existing methods have a temporary positive effect. In addition, post-Covid cheilitis is particularly resistant to therapy and has a long course. Therefore, it is urgent to search for new methods of treating exfoliative cheilitis that are highly effective with the least possibility of complications.This raises the need for further research to optimize the treatment of lip diseases. At the moment, one of the modern trends is the use of laser technologies. The purpose of the study is to increase the effectiveness of complex treatment of patients with exfoliative cheilitis who have had COVID-19 infection by including a diode laser in the treatment regimen.

Research objectives:

1. To study the effect of a diode laser on reducing the intensity of pain sensitivity in patients with exfoliative cheilitis.

2. To study the effect of a diode laser on the timing of mucosal regeneration in patients with exfoliative cheilitis.

MATERIAL AND METHODS

To achieve this goal, 21 patients aged 22 to 55 years who had COVID-19 over the past 6 months with a diagnosis of exfoliative cheilitis K13.0 were examined. All examined patients were randomized into 2 groups: the main group consisted of 10 patients, the control group - 11. All patients had

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The study noted complaints of increased lip size, a burning sensation, pain when closing the lips, difficulty eating, dry mouth, and an unpleasant aesthetic appearance. The red border of the lips is brightly hyperemic with individual white-honey-colored scales, the mouth is slightly open.

The clinical picture corresponded to the diagnosis of K13.0. Pain intensity was assessed on a verbal scale before and 24 hours after treatment. When analyzing the dental status of patients, a high value of the simplified hygiene index OHI-S was revealed: 2.81±0.22 in the main group and 2.78±0.23 in the control groups. When assessing the factors of unsatisfactory oral hygiene from the anamnesis, it was noted that the main reasons are the impossibility and difficulty of brushing teeth due to the irritating effect of hygiene products on inflamed and eroded areas. All patients underwent traditional complex treatment, including sanitation of the mouth, administration of keratoplasty ointments, and the use of hygienic lipsticks. When various changes in the nervous system were detected, sedatives were prescribed together with a neurologist or psychotherapist. In addition, the patients of the main group received a diode laser from Dr. SMILE (Italy), wavelength 980 nm, procedure power 0.7 W, in continuous mode, in a distant technique, with a non-initiated fiber for 1 min. on a lesion area of 1 sq. cm., three times, after 2 days.

RESEARCH RESULTS

One day after treatment, all patients in the main group noted a decrease in pain (pain intensity decreased from 5.2±0.2 before treatment to 0.18±0.12 ($p<0.05$)); in patients in the control group, pain intensity decreased from 5.4±0.3 to 2.9±0.16 ($p>0.05$).

On the 3rd day after treatment, patients in the main group experienced a pronounced therapeutic effect, which was manifested in a decrease or complete disappearance of the feeling of tightness and roughness of the lips, a decrease in the intensity of inflammation, active epithelization of the mucous membrane, a decrease in pain and discomfort. On the 10th day after treatment, OHI-S in the main group was 0.61±0.22, in the control group 1.1±0.24.

Complete epithelization of elements in the main group was observed after 14 days, while in the control group recovery occurred on average 21 days after the start of treatment. The insignificant effect of the treatment in the control group contributed to the formation of a negative psychological attitude towards further therapy.

CONCLUSIONS

1. It was found that a more pronounced decrease in pain sensitivity was observed in patients of the main group, where a diode laser was included in the treatment regimen.

2. The study showed that the use of laser helped stimulate the regeneration of the mucous membrane in the lesions. The period of final epithelization of

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elements in the main group was 14 days, in the control group - 21 days.

3. The inclusion of a diode laser in the treatment regimen for patients with cheilitis is justified and can significantly increase the effectiveness of complex therapy, which is expressed in reducing pain, accelerating epithelialization, increasing the duration of remission and reducing the number of relapses.

REFERENCES

1. Averyanov S.V. Etiology of cheilitis / S.V.Averyanov, E.V.Pupykina, I.V.Romeiko//National Association of Scientists. Monthly scientific journal. - 2014. - No. 4. - pp. 37-38
2. Belotserkovskaya Yu.G., Romanovskikh A.G., Smirnov I.P. COVID-19: Respiratory infection caused by a new coronavirus: new data on epidemiology, clinical course, patient management // Consilium Medicum. 2020. - No. 3. - P. 12-20.
3. Qizi, T. M. M., & Ugli, Y. S. M. (2023). IMPROVING THE TREATMENT OF PATHOLOGICALLY ALTERED DENTAL STATUS IN ELDERLY AND SENILE PEOPLE WITH PULMONARY TUBERCULOSIS. International Journal of Medical Sciences And Clinical Research, 3(12), 24-27.
4. Turaqulov, O., Umrullaeva, J., Zoyirov, T., & Toshtemirova, M. (2024). CHANGES IN THE ORAL CAVITY DUE TO DISEASES OF THE DIGESTIVE SYSTEM. Journal of Academic Research and Trends in Educational Sciences, 3(1), 98-102.
5. Jurakulov, A. (2024). IMMUNOCORREGIVE THERAPY OF CHRONIC RECURRENT APHTHOSIC STOMATITIS. Valeology: International Journal of Medical Anthropology and Bioethics, 2(10), 13-16.
6. G'ofurovich, J. A. UNPLEASANT ODOR FROM THE MOUTH-HALITOSIS, CAUSES AND TREATMENT OPPORTUNITIES Toshtemirova Mokhira Makhmud kizi.
7. Elnazarovich, Z. T. Toshtemirova Mohira Mahmud qizi, Juraqulov Abbos G'ofurovich, & Xudoyqulov Sardor Sobirovich.(2024). Changes in the Jawbone and Teeth in Arthrosis of the Temporomandibular Joint. International Journal of Scientific Trends, 3(3), 32-35.
8. Elnazarovich, Z. T., & Maxmudovna, T. M. (2024). CLINICAL MANIFESTATION OF AIDS IN THE ORAL CAVITY. Journal of new century innovations, 52(4), 39-42.
9. G'ofurovich, J. A. CLINICAL CASE OF APPLICATION OF THE "ICON" DENTAL INFILTRATION TECHNIQUE Toshtemirova Mokhira Makhmud kizi.
10. TOSHTEMIROVA, M., KIZI, M., BOZOROV, A. A., AKRAMOV, F., & XABIBJONOV, B. SHOULD ANTIBIOTICS BE USED IN COMPLEX THERAPY OF CHRONIC INFLAMMATORY PERIODONTAL DISEASES. Valeology: International Journal of Medical Anthropology and Bioethics.