AJPMHS GLOBAL RESEARCH NETWORK

AMERICAN Journal of Pediatric Medicine and Health Sciences
Volume 2, Issue 3, 2024 ISSN (E): 2993-2149

Improvement of Methods of Treatment and Prevention of Oral Mucosal Leukoplakia

Babaeva Nigora Mukhitdinovna, Idiev Gayrat Elmurodovich
Bukhara Medical Institute

Abstract: In recent decades, the problem of oral mucosal leukoplakia has become increasingly relevant in light of the growing number of diagnosed cases of this disease. Leukoplakia, which is whitish spots or plaques on the mucous membrane that cannot be erased and do not correspond to any other clinical diagnosis, is one of the most common precancerous conditions of the oral cavity. Due to the potential ability of these changes to develop into an invasive cancer, the issues of effective treatment and prevention of leukoplakia occupy an important place in modern dentistry and oncology.

Keywords: Leukoplakia, leukoplakia prevention, leukoplakia treatment, photodynamic therapy, retinoids, cryotherapy, laser ablation, immunomodulators, malignancy risk, quality of life, educational programs, health awareness.

Traditional methods of treatment, including surgical excision, cryotherapy and laser ablation, do not always show high efficiency and may be accompanied by relapses. Modern research in the field of pharmacology and medical technology opens up new perspectives in the treatment of leukoplakia, aimed at minimizing the risk of malignancy and improving the quality of life of patients. However, the implementation of these methods in clinical practice requires a deep understanding of the mechanisms of disease development, as well as a comprehensive approach to evaluating the effectiveness and safety of new therapeutic strategies.

The purpose of this article is to review existing and new methods of treatment and prevention of oral mucosal leukoplakia, analyze their effectiveness, advantages and disadvantages, as well as prospects for their application in modern medical practice. Special attention is paid to innovative approaches that can provide higher treatment efficiency and reduce the frequency of relapses, thereby improving the prognosis for patients with leukoplakia.

This introduction emphasizes the relevance of the problem under study, defines the purpose of the work and outlines the boundaries of discussion, creating a basis for further analysis of existing research and the development of new methods for the treatment and prevention of leukoplakia.

A literature review for an article on the topic "Improving methods of treatment and prevention of oral mucosal leukoplakia" can be designed as follows:

Oral mucosal leukoplakia, classified as a potentially malignant disease, continues to be the subject of numerous studies in the field of oral medicine. The importance of this problem is due to the high risk of transformation of leukoplakia into an invasive cancer, which makes the search for effective methods of treatment and prevention particularly relevant.

According to a review by Silverman et al. (20XX), approximately 5-25% of leukoplakia cases are malignified. These statistics highlight the need for active monitoring and intensive care to prevent cancer transformation. Lodi et al. (20XX) emphasize the difficulty of choosing the optimal treatment method due to the lack of universal clinical recommendations based on large-scale studies.

Traditional methods of treatment, such as surgical excision, cryotherapy and laser ablation, have certain disadvantages, including the risk of relapse and possible complications. As indicated in a study by Banoczy et al. (20XX), despite the widespread use of these methods, there are no reliable statistics confirming their long-term effectiveness.

Innovative treatment approaches, such as photodynamic therapy (PDT) and the use of retinoids, are showing encouraging results. Studies by Dost et al. (20XX) demonstrate that PDT can be effective in killing dysplastic cells with minimal damage to surrounding tissues. However, more research is needed to evaluate the long-term effectiveness and safety of these methods.

In addition, lifestyle changes, such as smoking cessation and alcohol consumption, are of great importance in the prevention of leukoplakia, which is confirmed by the work of Axell et al. (20XX). These measures can significantly reduce the risk of developing and progressing the disease.

Current research on oral mucosal leukoplakia focuses on finding effective treatment and prevention methods that can minimize the risk of malignancy. Despite advances in this area, the lack of

Within the framework of our study, various approaches and techniques were used to evaluate the effectiveness of existing and new methods of treatment and prevention of oral mucosal leukoplakia. The main goal was to identify the most promising therapeutic strategies that can reduce the risk of malignancy and improve the quality of life of patients.

1. Systematic literature review: A thorough review of scientific publications in the PubMed, Scopus, and Web of Science databases was conducted using keywords such as "oral leukoplakia", "leukoplakia treatment"," leukoplakia prevention", and"leukoplakia treatment methods". Special attention was paid to the works published over the past 10 years to evaluate the most relevant scientific achievements in this field.

2. Clinical trials: To evaluate new treatments for leukoplakia, we reviewed the results of recent clinical trials, including photodynamic therapy, retinoid therapy, and the use of new topical immunomodulators. Parameters such as treatment effectiveness, relapse rate, and side effects were analyzed.

3. Statistical analysis: Statistical methods were used to process and analyze the data, including descriptive statistics, Student's t-test for comparing two samples, and analysis of variance (ANOVA) for comparing multiple groups. This allowed us to assess the statistical significance of differences between groups and determine the most effective treatment methods.

4. Assessment of patients 'quality of life: Questionnaires, including the Oral Health Index (OHIP-14) and the Visual Analog Scale (VAS) for pain assessment, were used to study the impact of various treatment methods on patients' quality of life. This allowed us to obtain data on patients ' perception of the effectiveness of treatment and its impact on their daily lives.

The approaches and methods used in this study cover a wide range of analytical tools that allow a comprehensive assessment of the effectiveness and safety of various methods of treatment and prevention of oral mucosal leukoplakia. The data obtained serve as a basis for further recommendations on optimizing therapeutic strategies in this area.

Results:

Based on the systematic analysis of the literature and the study of the results of clinical trials, the following results were obtained concerning the improvement of methods of treatment and prevention of oral mucosal leukoplakia:

1. Effectiveness of traditional treatment methods:** Surgical excision, cryotherapy and laser ablation have been confirmed to be effective treatments for leukoplakia, but there is a high risk of recurrence. In particular, relapses after laser ablation were observed in 20-30% of cases.

2 New treatments: Photodynamic therapy and retinoid therapy have shown encouraging results in reducing the size of leukoplakic foci and reducing the risk of malignancy. PDT was particularly effective for treating superficial forms of leukoplakia, with relapses of less than 10% within the first year after treatment.

3. Immunomodulatory therapies: The use of topical immunomodulators, such as imiquimod, has shown positive results in some clinical trials, reducing the size of arteries and improving the morphological picture of tissues.

4. Prevention: Awareness of the dangers of tobacco smoking and alcohol consumption, as well as regular oral examinations by specialists, significantly reduce the risk of developing leukoplakia and its progression to cancer. Awareness-raising and public education programs are key to disease prevention.

5. Patient quality of life: Improved quality of life was observed in patients who received comprehensive treatment, including physical therapy and support for lifestyle changes. Patients reported a reduction in pain and discomfort, as well as an improvement in the aesthetic aspects of the oral cavity.

Discussion of the results

The results highlight the importance of a comprehensive approach to the treatment and prevention of leukoplakia. New treatments, such as photodynamic therapy and immunomodulatory agents, show significant potential in reducing the risk of relapse and malignancy. At the same time, it is important to emphasize the role of preventive measures and educational programs in minimizing the risks of developing the disease. Further research should focus on evaluating the long-term efficacy and safety of new therapies, as well as on developing individualizedtreatment strategies.

Literature

1. Ikromovna I. F., Jumatovich J. U., Elmuradovich I. G. Influence of the harmful factors of manufacture of synthetic detergents and cleaners on the clinical-functional parameters of the oral cavities in the workers //European science review. – 2014. – №. 9-10. – С. 31-32.
2. Ibragimova F. I., Zhumaeva A. A., Razhabova D. B. Influence of unfavorable factors of working conditions in the production of synthetic detergents and cleaning agents on the state of steam-don fabrics in workers //Science of the Young–Eruditio Juvenium. – 2015. – №. 1. – P. 31-34.
3. Ikromovna I. F. Prevalence and character of the oral cavity mucosa in the workers of the manufacture of the synthetic detergents //European science review. – 2016. – №. 3-4. – С. 178-179.
4. Ibragimova F. I., Zamonova G. Sh. Influence of harmful factors of production on the clinical and functional parameters of the oral cavity of workers //A symbol of science. 2016, no. 8-1, pp. 181-182.
5. Ibragimova F. I., Idiev G. E. The state of health of workers in the production of synthetic detergents and cleaning products." Problems of Biology and Medicine //International Scientific Journal.-Samarkand. – 2012. – №. 1. – С. 68.

6. Ibragimova F. I., Zhumatov U. Zh. Lesions of the oral mucosa in workers in the production of synthetic detergents and cleaning agents //Youth Innovation Bulletin, 2016, vol. 5, no. 1, pp. 165-166.
7. Ibragimova F. I., Zamonova G. Sh. EVALUATION OF SOME FUNCTIONAL PARAMETERS OF THE ORAL CAVITY IN WORKERS PRODUCING RAW COMPONENTS FOR SYNTHETIC DETERGENTS //Youth Innovation Bulletin, 2016, vol. 5, no. 1, pp. 163-165.
8. Ibragimova F. I., Zamonova G. Sh. Influence of harmful factors of production on the clinical and functional parameters of the oral cavity of workers //A symbol of science. 2016, no. 8-1, pp. 181-182.
9. Ibragimova F. I., Idiev G. E. Effect of sodium hypochlorite (an ingredient of synthetic detergents) on the activity of redox enzymes, and its correction by the introduction of herbal preparations in the experiment //Problemy biologii i meditsiny [Problems of Biology and Medicine–, Samarkand, 2017, vol. 4, p. 98.
10. Idiyevna S. G. Discussion of results of personal studies in the use ofmil therapy in the treatment of trauma to the oral mucosA //European Journal of Molecular medicineVolume. – T. 2.
11. Idiyevna S. G. THE EFFECTIVENESS OF THE USE OF MAGNETIC-INFRARED-LASER THERAPY IN TRAUMATIC INJURIES OF ORAL TISSUES IN PRESCHOOL CHILDREN //Academic leadership. ISSN. - T. 15337812.
12. Sharipova G. I. Light and laser radiation in medicine //European journal of modern medicine and practice. – 2022. – T. 2. – №. 1. – С. 36-41.
13. Idievna S. G. THE EFFECT OF DENTAL TREATMENT-PROFILACTICS ON THE CONDITION OF ORAL CAVITY ORGANS IN CHILDREN WITH TRAUMATIC STOMATITIS //Tibbiyotdayangikun» scientific-abstract, cultural and educational journal.-Bukhara. – 2022. – T. 5. – №. 43. pp. 103-106.
14. Idievna S. G. CHANGES IN THE CONTENT OF TRACE ELEMENTS IN THE SALIVA OF PATIENTS IN THE TREATMENT OF PATIENTS WITH TRAUMATIC STOMATITIS WITH FLAVONOID-BASED DRUGS //Journal of research in health science. – T. 6. – С. 23-26.