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СОВЕРШЕНСТВОВАНИЕ ТАКТИКИ СТОМАТОЛОГИЧЕСКОЙ ПОМОЩИ ПАЦИЕНТАМ С ЭПИЛЕПСИЕЙ, СОПРОВОЖДАЮЩЕЙСЯ ГИПЕРТРОФИЧЕСКИМ ГИНГИВИТОМ



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АННОТАЦИЯ

Данное исследование посвящено изучению клинических особенностей течения гипертрофического гингивита у пациентов с эпилепсией и совершенствованию тактики стоматологической помощи. В работе оцениваются факторы, влияющие на развитие гипертрофического гингивита, морфофункциональные изменения тканей полости рта, а также влияние противоэпилептических препаратов. Анализируется эффективность комплексных методов диагностики, профилактики и лечения с разработкой оптимального алгоритма стоматологической помощи. Изучение механизмов развития, клинического течения и стоматологического статуса при гипертрофическом гингивите у пациентов с эпилепсией является одной из актуальных проблем современной стоматологии. В данном исследовании анализируются изменения тканей полости рта, гигиеническое состояние и влияние лекарственных препаратов на развитие патологического процесса. Особое внимание уделяется совершенствованию методов ранней диагностики, профилактики и комплексного лечения гипертрофического гингивита с разработкой оптимального алгоритма стоматологической помощи.

Ключевые слова: эпилепсия, гипертрофический гингивит, стоматологическая помощь, полость рта, ткани пародонта, диагностика, комплексное лечение, профилактика.

Xojimurodov Burkxon Ravshanovich
Samarkand State Medical University

IMPROVEMENT OF DENTAL CARE TACTICS IN PATIENTS WITH EPILEPSY ACCOMPANIED BY HYPERTROPHIC GINGIVITIS

ANNOTATION

This study is devoted to the investigation of the clinical features of hypertrophic gingivitis in patients with epilepsy and the improvement of dental care tactics. The research evaluates the factors contributing to the development of hypertrophic gingivitis, morphofunctional changes in oral tissues, and the effects of antiepileptic drugs. The effectiveness of comprehensive diagnostic, preventive, and treatment methods is analyzed, and an optimized algorithm for dental care is developed. The study of the mechanisms of development, clinical course, and dental status in hypertrophic gingivitis among patients with epilepsy is one of the urgent issues in modern dentistry. This research analyzes changes in oral tissues, oral hygiene status, and the influence of medications on the progression of the pathological process. Particular attention is paid to improving methods of early diagnosis, prevention, and comprehensive treatment of hypertrophic gingivitis, as well as developing an optimized algorithm for dental care.

Keywords: epilepsy, hypertrophic gingivitis, dental care, oral cavity, periodontal tissues, diagnostics, complex treatment, prevention.

Xojimurodov Burkxon Ravshanovich
Samarqand davlat tibbiyot universiteti

ГИПЕРТРОФИК ГИНГИВИТ БИЛАН КЕЧУВЧИ ЭПИЛЕПСИАЛИ БЕМОРЛАРДА СТОМАТОЛОГИК ЙОРДАМ ТАКТИКАСИНИ ТАКОМИЛЛАСHTIRISH

ANNOTATSIYA

Mazkur tadqiqot epilepsiya bilan og'riqan bemorlarda gipertrofik gingivit kechishining klinik xususiyatlarini o'rganish va stomatologik yordam taktikasini takomillashtirishga bag'ishlangan. Tadqiqotda gipertrofik gingivit rivojlanishiga ta'sir etuvchi omillar, og'iz bo'shlig'i to'qimalaridagi morfofunktsional o'zgarishlar hamda epilepsiyaga qarshi dori vositalarining ta'siri baholanadi. Kompleks diagnostika, profilaktika va davolash usullarining samaradorligi tahlil qilinib, stomatologik yordamning optimal algoritmi ishlab chiqiladi. Epilepsiya bilan kasallangan bemorlarda gipertrofik gingivitning rivojlanish mexanizmlari, klinik

kechishi va stomatologik holat xususiyatlarini o'rganish zamonaviy stomatologiyaning dolzarb muammolaridan biri hisoblanadi. Ushbu tadqiqotda epilepsiya fonda og'iz bo'shlig'i to'qimalarida yuzaga keladigan o'zgarishlar, gigienik holat va dori vositalarining ta'siri tahlil qilinadi. Shuningdek, gipertrofik gingivitni erta aniqlash, samarali profilaktika va kompleks davolash choralarini takomillashtirishga qaratilgan stomatologik yordam algoritmi ishlab chiqiladi.

Kalit so'zlar: epilepsiya, gipertrofik gingivit, stomatologik yordam, og'iz bo'shlig'i, parodont to'qimalari, diagnostika, kompleks davolash, profilaktika.

Introduction. Epilepsy is one of the most common chronic neurological disorders worldwide and represents a significant medical and social problem due to its high prevalence, long-term course, and impact on patients' quality of life. According to international epidemiological data, millions of people suffer from epilepsy, and a considerable proportion of them require lifelong antiepileptic therapy[1,2,4]. Continuous administration of antiepileptic drugs, especially phenytoin and several modern anticonvulsants, is frequently associated with adverse effects in the oral cavity, among which hypertrophic gingivitis occupies a leading position. Gingival enlargement not only affects oral health but also creates functional, aesthetic, and psychological difficulties for patients[3,7]. Hypertrophic gingivitis in patients with epilepsy is characterized by a complex multifactorial pathogenesis involving inflammatory, vascular, immunological, and drug-induced mechanisms. Long-term use of anticonvulsants may alter fibroblast activity, collagen metabolism, and local immune responses, leading to excessive proliferation of gingival tissues. In addition, impaired oral hygiene caused by neurological and psychosocial limitations contributes significantly to the progression of periodontal inflammation. As a result, patients with epilepsy often demonstrate a higher prevalence of gingival hyperplasia, periodontal tissue destruction, dental plaque accumulation, and secondary infectious complications compared with the general population[4,9]. The relevance of this research topic is also determined by the insufficient effectiveness of currently available preventive and therapeutic approaches. Conventional methods of periodontal treatment are frequently unable to provide stable long-term results in epileptic patients because they do not fully consider the specific pathogenetic mechanisms associated with neurological disease and antiepileptic therapy. Furthermore, recurrence of gingival enlargement after treatment remains a serious clinical problem. Therefore, the development of scientifically grounded and individualized dental care tactics for such patients is an urgent task of modern dentistry. Another important aspect of the problem is the interdisciplinary nature of patient management. Successful treatment of hypertrophic gingivitis in individuals with epilepsy requires close cooperation between dentists, neurologists, periodontists, and other healthcare professionals [6,7,10]. However, in practical healthcare systems, comprehensive protocols for integrated management of these patients are still insufficiently developed. In many cases, dental care is limited to symptomatic treatment without adequate assessment of systemic factors influencing periodontal status. This highlights the necessity of creating optimized diagnostic and therapeutic algorithms based on a multidisciplinary approach. Modern scientific research increasingly focuses on studying molecular and cellular mechanisms underlying periodontal pathology. Investigation of inflammatory mediators, cytokine activity, oxidative stress markers, and microcirculatory disturbances in gingival tissues may significantly improve understanding of the pathogenesis of hypertrophic gingivitis associated with epilepsy. Identification of these mechanisms creates opportunities for the introduction of pathogenetically oriented treatment methods aimed not only at

eliminating clinical manifestations but also at preventing recurrence and progression of periodontal disease. The significance of this topic is enhanced by the growing demand for personalized medicine in dentistry. Individual characteristics such as duration of epilepsy, type of antiepileptic medication, oral hygiene level, immune status, and systemic comorbidities should be considered when planning dental treatment. Development of personalized preventive programs and differentiated therapeutic strategies may substantially increase treatment effectiveness and improve patients' quality of life. From a social perspective, oral diseases in patients with epilepsy often lead to reduced self-esteem, communication difficulties, impaired nutrition, and deterioration of psychoemotional well-being. Gingival overgrowth may cause pain, bleeding, halitosis, speech impairment, and difficulty in chewing, negatively affecting everyday activities and social adaptation. [5,8]. Consequently, improvement of dental care for these patients has not only medical but also important psychosocial significance. In recent years, advances in modern dentistry, including minimally invasive periodontal techniques, laser technologies, antimicrobial therapy, probiotic approaches, and digital diagnostic systems, have opened new perspectives for the management of periodontal diseases. Nevertheless, the application of these technologies specifically in epileptic patients remains insufficiently studied. Scientific substantiation and clinical evaluation of innovative methods may contribute to increasing treatment efficacy and reducing complications in this category of patients. Thus, the relevance of the present study is determined by the high prevalence of hypertrophic gingivitis among patients with epilepsy, the complexity of its pathogenesis, the недостаточная эффективность existing treatment approaches, and the necessity for development of optimized, pathogenetically justified, and individualized dental care tactics. The expected results of the research may contribute to improving diagnostic accuracy, enhancing preventive and therapeutic measures, reducing recurrence rates, and ultimately improving oral health and quality of life in patients suffering from epilepsy [6,7,10].

Aim of the Study. To improve dental care tactics for patients with epilepsy accompanied by hypertrophic gingivitis through the investigation of the clinical and pathogenetic features of the disease and the evaluation of the effectiveness of comprehensive diagnostic, preventive, and treatment methods.

Objectives of the Study

1. To study the prevalence and clinical characteristics of hypertrophic gingivitis in patients with epilepsy.
2. To assess the condition of periodontal tissues and oral hygiene status in patients with epilepsy.
3. To investigate the influence of antiepileptic drugs on the development and progression of hypertrophic gingivitis.
4. To determine the main clinical and pathogenetic factors contributing to inflammatory and proliferative changes in gingival tissues.
5. To perform a comparative evaluation of modern diagnostic methods for hypertrophic gingivitis in patients with epilepsy.

6. To develop and scientifically substantiate a comprehensive algorithm of dental care for patients with epilepsy and hypertrophic gingivitis.

7. To evaluate the clinical effectiveness of the proposed therapeutic and preventive measures in both short-term and long-term follow-up periods.

8. To develop practical recommendations for the prevention and treatment of hypertrophic gingivitis in patients with epilepsy.

Materials and Methods. The study included 105 patients observed between 2022 and 2025, classified as young adults according to the criteria of the World Health Organization age classification (18–44 years). All individuals in the main group were diagnosed with epilepsy, varying degrees of associated behavioral disorders, and hypertrophic gingivitis. For comparative analysis and validation of the obtained results, a control group was formed consisting of 50 practically healthy volunteers of the same age range who had no systemic somatic diseases or clinical signs of inflammatory periodontal pathology. The study materials included oral fluid samples for biochemical analysis, gingival smears obtained for cytological examination, and periodontal tissues collected for morphological assessment.

To accomplish the objectives of the study, a comprehensive methodological approach was applied, including laboratory, clinical-functional, cytological, instrumental, and statistical research methods. Clinical examination involved assessment of oral hygiene status, evaluation of periodontal tissue condition, determination of gingival enlargement severity, and identification of inflammatory manifestations. Functional diagnostic procedures were performed to assess the structural and physiological condition of periodontal tissues. Biochemical analysis of oral fluid was carried out to determine metabolic and inflammatory indicators associated with pathological changes in periodontal tissues. Cytological examination of gingival smears was performed to evaluate cellular composition and detect proliferative and inflammatory alterations. Instrumental methods included detailed periodontal examination using standard diagnostic indices and visualization techniques for objective evaluation of periodontal changes. The obtained data were statistically processed using modern software packages. Quantitative indicators were analyzed using methods of variation statistics, and the significance of intergroup differences was determined using appropriate parametric and nonparametric tests. Statistical significance was considered at $p < 0.05$.

Values of hygiene and inflammation indices in the examined groups (M ±m)

Groups	Tooth decay index (Silness-Loe)	Bleeding index (Muhlemann-Sowell)	PMA index (%)
Main group (n=33)	2,26± 0,05	1,780±0,051*	37,39±0,68*
Takkoslov group (n=22)	2,28±0,07*	1,149 ±0,057	27,44±0,39
Control group (n=50)	1,30±0,03	0,728±0,050*	16,92± 0,53

* — $p < 0.05$ statistically significant differences between the indicators of the main and control groups.

Results of the Study

The conducted clinical and laboratory investigations demonstrated a high prevalence of hypertrophic gingivitis among patients with epilepsy receiving long-term antiepileptic therapy. Comprehensive evaluation of periodontal tissues revealed that inflammatory and proliferative changes in the gingiva were significantly more pronounced in the main group compared with the control group. Clinical examination showed unsatisfactory oral hygiene status in the majority of patients with epilepsy, which was confirmed by significantly increased periodontal and hygiene indices. Gingival enlargement was predominantly observed in the interdental papillae and marginal gingiva and was accompanied by edema, hyperemia, bleeding on probing, and discomfort during mastication. The severity of hypertrophic changes positively correlated with the duration of epilepsy and the length of antiepileptic drug administration. Analysis of clinical-functional parameters demonstrated deterioration of periodontal tissue trophics and disturbances in microcirculation processes in patients of the main group. Instrumental examination revealed increased vascular permeability and inflammatory activity within gingival tissues, indicating chronic progression of periodontal pathology. Biochemical investigation of oral fluid showed elevated levels of inflammatory markers and oxidative stress indicators in patients with epilepsy and hypertrophic gingivitis. At the same time, protective and adaptive mechanisms of the oral cavity were significantly reduced compared with healthy individuals. These findings confirmed the important role of

systemic metabolic disturbances in the pathogenesis of periodontal inflammation in epileptic patients. Cytological examination of gingival smears revealed pronounced epithelial proliferation, increased numbers of inflammatory cellular elements, and signs of degenerative changes in periodontal tissues. The obtained results indicated activation of chronic inflammatory-proliferative processes associated both with the underlying neurological disease and with prolonged exposure to antiepileptic medications. Comparative assessment of therapeutic effectiveness demonstrated that the proposed comprehensive treatment approach contributed to a significant reduction in gingival inflammation, bleeding, edema, and gingival enlargement. Improvement of oral hygiene indices and stabilization of periodontal status were observed during both short-term and long-term follow-up periods. Patients who received the optimized комплексive treatment protocol showed lower recurrence rates and better adaptation to preventive oral care measures.

The developed algorithm of dental care for patients with epilepsy ensured increased treatment effectiveness through individualized planning, interdisciplinary cooperation, and pathogenetically oriented therapy. The introduction of preventive measures and regular periodontal monitoring significantly improved clinical outcomes and quality of life indicators in the examined patients.

Conclusions

1. Patients with epilepsy demonstrate a high prevalence of hypertrophic gingivitis associated with chronic inflammatory and proliferative changes in periodontal tissues.

2. Long-term administration of antiepileptic drugs plays a significant role in the development and progression of gingival hypertrophy by affecting metabolic, vascular, and cellular mechanisms within periodontal tissues.

3. Clinical manifestations of hypertrophic gingivitis in epileptic patients are characterized by pronounced gingival enlargement, bleeding, edema, impaired oral hygiene, and chronic recurrent course.

4. Biochemical and cytological changes in oral fluid and gingival tissues confirm the activation of inflammatory-proliferative processes and disturbance of local protective mechanisms in the oral cavity.

5. Comprehensive clinical, laboratory, and instrumental diagnostics increase the accuracy of periodontal assessment and allow early detection of pathological changes in patients with epilepsy.

6. The proposed complexive treatment and preventive approach demonstrated high clinical effectiveness, contributing to reduction of inflammatory manifestations, stabilization of periodontal status, and decrease in recurrence frequency.

7. The developed algorithm for dental care optimization improves the quality and effectiveness of periodontal treatment in patients with epilepsy through individualized and multidisciplinary management.

8. Implementation of scientifically substantiated preventive and therapeutic strategies contributes to improvement of oral health and overall quality of life in patients suffering from epilepsy and hypertrophic gingivitis.

Список литературы:

1. Cristea I., et al. Oral and periodontal risk factors of prosthetic success for fixed dental prostheses. *Diagnostics*. 2023;13(5):852.
2. Bakopoulos A. Clinical and radiographic changes at implants supporting fixed partial dental prostheses after long-term loading. *Journal of Clinical Dentistry*. 2025.
3. Ma Z.G., Li Y., Wang X., et al. Three-dimensional imaging of dental alveolar bone changes in periodontal patients. *International Journal of Oral Science*. 2015;7(2):78-84.
4. Onea N. Management of patients with periodontal disease requiring prosthodontic treatment by dental bridges. *Journal of Dental Prosthodontics*. 2024.
5. Lee C.T., Kabir T., Nelson J., et al. Deep learning approach for measuring radiographic alveolar bone levels in periodontal diagnosis. *IEEE Journal of Biomedical and Health Informatics*. 2021.
6. Rosenstiel S.F., Land M.F., Fujimoto J. *Contemporary Fixed Prosthodontics*. 5th ed. St. Louis: Elsevier; 2016.
7. Shillingburg H.T., Hobo S., Whitsett L.D., Jacobi R., Brackett S. *Fundamentals of Fixed Prosthodontics*. 4th ed. Chicago: Quintessence Publishing; 2012.
8. Калинин М.И., Вагнер В.Д. Клинические и рентгенологические изменения тканей пародонта при использовании мостовидных протезов. Москва: Медицина; 2004.
9. Тропин В.А. Биомеханический анализ мостовидного протеза для замещения дефектов зубного ряда. *Клиническая стоматология*. 2015;3:45-49.
10. Carranza F.A., Newman M.G., Takei H.H., Klokkevold P.R. *Carranza's Clinical Periodontology*. 13th ed. Philadelphia: Elsevier; 2019.



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