КЛИНИЧЕСКАЯ ОЦЕНКА ЭФФЕКТИВНОСТИ КОМПЛЕКСНОГО ЛЕЧЕНИЯ КАТАРАЛЬНОГО ГИНГИВИТА

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АННОТАЦИЯ

В статье рассматриваются вопросы клинической оценки эффективности комплексного лечения катарального гингивита. Освещаются основные клинические проявления заболевания, включая гиперемию, отёчность и кровоточивость дёсен, а также роль зубного налёта в развитии воспалительного процесса. Анализируется значение профессиональной гигиены полости рта, индивидуальных гигиенических рекомендаций и местных антисептических средств в комплексном лечении. Особое внимание уделяется клиническим показателям эффективности терапии, включая гингивальные индексы, кровоточивость при зондировании и количество зубного налёта.

Ключевые слова: катаральный гингивит, комплексное лечение, клиническая эффективность, воспаление дёсен, зубной налёт, гигиена полости рта, гингивальный индекс, здоровье пародонта.

CLINICAL EVALUATION OF THE EFFECTIVENESS OF COMPREHENSIVE TREATMENT FOR CATARRHAL GINGIVITIS

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ABSTRACT

This article examines the clinical evaluation of comprehensive treatment for catarrhal gingivitis. The main clinical manifestations, including gingival redness, swelling, and bleeding, as well as the role of dental plaque in the development of inflammation, are discussed. The importance of professional oral hygiene, individual hygiene recommendations, and topical antiseptic agents in comprehensive treatment is reviewed. Particular attention is given to clinical outcome measures, including gingival indices, bleeding on probing, and dental plaque levels, for assessing treatment effectiveness.

Keywords: catarrhal gingivitis, comprehensive treatment, clinical effectiveness, gingival inflammation, dental plaque, oral hygiene, gingival index, periodontal health.

Introduction

Gingivitis is one of the most common inflammatory diseases of the oral cavity. Catarrhal gingivitis is characterized by gingival redness, swelling, and bleeding, particularly during toothbrushing or clinical examination. The accumulation of microbial dental plaque is considered the primary etiological factor in plaque-induced gingivitis [1, 2].

Comprehensive treatment aims to eliminate the causes of inflammation, reduce dental plaque, and improve individual oral hygiene. The main components include professional mechanical plaque removal, instruction in proper toothbrushing techniques, and the use of additional topical agents when clinically indicated.

Evaluating treatment effectiveness requires objective clinical criteria to determine changes in gingival health before and after treatment.

Relevance of the Topic

The relevance of this topic is determined by the high prevalence of gingival inflammation and the need to improve preventive and therapeutic approaches. Inadequate oral hygiene and persistent dental plaque accumulation may contribute to the development and maintenance of gingival inflammation.

Professional mechanical plaque removal, combined with appropriate home oral hygiene practices, is an essential component of treatment. A systematic review and meta-analysis published in 2026 examined the clinical efficacy of professional mechanical plaque removal in patients with dental biofilm-induced gingivitis and highlighted the importance of oral hygiene measures in achieving treatment benefits [1].

Topical antiseptic agents, including chlorhexidine, may be used as adjunctive treatments in selected cases. However, their use should be based on clinical indications because adverse effects, such as extrinsic tooth staining and temporary alterations in taste perception, may occur [3].

Therefore, evaluating treatment effectiveness through standardized clinical indicators is important for selecting appropriate treatment strategies and monitoring patient outcomes.

Literature Review

Etiology and Clinical Manifestations of Catarrhal Gingivitis

Plaque-induced gingivitis develops as an inflammatory response to microbial biofilm accumulation on tooth surfaces. Its principal clinical manifestations include gingival erythema, edema, and bleeding on probing.

Clinical indices are used to assess the severity of inflammation and monitor changes following treatment. The consensus report of the 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions emphasizes the importance of clinical findings, particularly bleeding on probing, in evaluating gingival health [2].

Importance of Professional Oral Hygiene

Professional mechanical plaque removal is a key component of catarrhal gingivitis treatment. However, long-term improvement also depends on the patient's adherence to effective oral hygiene practices.

A comprehensive approach includes professional dental cleaning, instruction in proper toothbrushing techniques, and regular monitoring of oral hygiene. Combining professional plaque removal with individualized hygiene recommendations may help reduce plaque accumulation and gingival inflammation [1].

Role of Topical Antiseptic Agents

Chlorhexidine mouthrinse may be used as an adjunct to mechanical plaque control in selected clinical situations. A Cochrane systematic review found that chlorhexidine mouthrinse, when added to routine oral hygiene, can reduce dental plaque and may improve gingival health [3].

Nevertheless, its use may cause tooth staining, temporary taste disturbances, and other adverse effects. Consequently, the concentration and duration of treatment should be determined according to clinical indications and professional recommendations. Antiseptic agents should not replace mechanical plaque removal or routine oral hygiene.

Clinical Criteria for Evaluating Treatment Effectiveness

The effectiveness of comprehensive treatment for catarrhal gingivitis can be evaluated using the following clinical parameters:

- Reduction in gingival redness and swelling.
- Decreased bleeding on probing.
- Reduction in dental plaque accumulation.
- Improvement in gingival index scores.
- Reduction in patient-reported symptoms.
- Improvement in individual oral hygiene practices.

Clinical assessments should be performed before treatment and after a predefined follow-up period using consistent diagnostic criteria.

When different treatment protocols are compared, researchers should report the sample size, treatment duration, follow-up period, and statistical methods. These measures allow objective assessment of treatment outcomes and the clinical significance of observed changes.

Conclusion

Comprehensive treatment of catarrhal gingivitis should focus on professional mechanical plaque removal, improvement of individual oral hygiene, and regular assessment of gingival health. Combining professional treatment with appropriate home hygiene practices may contribute to better clinical outcomes.

Treatment effectiveness should be evaluated using objective indicators, including gingival redness, swelling, bleeding on probing, dental plaque levels, and gingival index scores. Topical antiseptic agents may be considered as adjunctive treatments when clinically indicated, with appropriate attention to potential adverse effects.

Further standardized clinical studies are needed to establish the comparative effectiveness of specific treatment protocols and identify the most appropriate approaches for different patient groups.

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