European International Journal of Pedagogics

TYPE Original Research
PAGE NO. 44-49
DOI 10.55640/eijp-05-01-09

Gingivitis - Symptoms and Treatment

Djumaev Asliddin Abdusamadovich

Clinic Resident of the Department of Orthopedic Dentistry Samarkand State Medical University, Samarkand, Uzbekistan

Islamova Nilufar Bustanovna

PhD, Assistant Department of Orthopedic Dentistry Samarkand State Medical University Samarkand, Uzbekistan

OPEN ACCESS

SUBMITED 25 October 2024
ACCEPTED 27 December 2024
PUBLISHED 17 January 2025
VOLUME Vol.05 Issue01 2025

Abstract: The inflamed gum becomes soft, rough, and does not adhere tightly to the crowns of the teeth. According to the World Health Organization, more than 90-95% of adults have inflammatory processes of the soft tissues of the oral cavity, and tooth loss due to inflammation of the gums and periodontium (tissues surrounding the tooth) occurs 5 times more often than from carious lesions.

Keywords: Soreness, swelling, bleeding, and the release of exudate.

Introduction:

Gingivitis is an inflammatory gum disease that is manifested by soreness, swelling, bleeding, and the release of exudate (fluid that tissues produce in response to inflammation).

The inflamed gum becomes soft, rough, and does not adhere tightly to the crowns of the teeth. According to the World Health Organization, more than 90-95% of adults have inflammatory processes of the soft tissues of the oral cavity, and tooth loss due to inflammation of the gums and periodontium (tissues surrounding the tooth) occurs 5 times more often than from carious lesions.

In most cases, gingivitis occurs due to plaque buildup as a result of poor oral hygiene. Plaque plaques constantly irritate the mucous membrane, form pockets (increase the distance between the tooth and soft tissues), in which bacteria actively multiply. That is, bacteria are most often the cause of gum inflammation. In addition, gingivitis can be caused by allergies, fungal and viral infections.

Provoking factors in the development of gum inflammation:

• hormonal changes;

• diabetes mellitus;

• vitamin deficiency;

Acquired (HIV) and congenital immunodeficiency (Di Giorgi syndrome);

• pregnancy;

• leukemia;

• lack of vitamin C;

• burdened heredity (there are close relatives who suffered from inflammatory gum diseases);

• gum damage.

Mucosal damage can occur with malocclusion, dental manipulations, exposure to aggressive chemicals, the use of a hard toothbrush, and the consumption of solid foods. Even a minor injury to the epithelium is an entrance gate for infection.

Iatrogenic (related to medical manipulations) factors contributing to inflammation include the sharp edges of dentures, crowns, and unpolished fillings adjacent to the gum.

Symptoms of gingivitis

At the initial stage of the disease, patients complain of discomfort in the oral cavity. On examination, the affected gum area is hyperemic (i.e., there is redness) and enlarged. Bleeding may occur during eating solid foods and brushing teeth. There is usually no pain at an early stage of the disease. Many patients complain of increased salivation.

The inflamed gum lags behind the surface of the tooth, food residues accumulate in the formed cavity, and bad breath appears. If the disease is not treated, bacteria actively multiply in the pocket, caries of the tooth neck develops.

Over time, pain in the gums appears, which increases during meals and during dental examinations. The pain syndrome is especially pronounced when eating hot, cold and sour. With severe inflammation or a widespread process, not only local, but also general symptoms may appear: fever, weakness, fatigue, irritability.

Upon examination, the dentist sees a discoloration of the affected areas of the mucous membrane, hypertrophy (increase in volume) of the interdental papillae and the edges of the gums. Plaque, tartar, and caries lesions are usually present in the area of inflammation. When examined with a dental instrument, the gums may bleed. With chronic inflammation, the clinical picture is erased, but severe soft tissue hypertrophy may occur. With a long-term ongoing process, the overgrown gum can cover almost the entire crown of the tooth. With desquamative (with the appearance of blisters on the gums) and ulcerative gingivitis, blisters and sores can form on the gums.

Pathogenesis of gingivitis

The development of gingivitis begins with the formation of plaque from plaque. They form after the absence of proper oral hygiene for 1-2 days. The most common places of plaque formation are the interdental spaces and the cervical zone.

A pellicle film is formed from saliva and secreted gum fluid. Normally, it performs a protective function, but in the initial stages of gingivitis, it promotes the adhesion of bacteria that are present in the oral cavity, even in a healthy person. These are usually aerobic cocci and sticks.

Microorganisms actively multiply, and an anaerobic (oxygen-free) environment is formed in the depths of their colony. This creates optimal conditions for the reproduction of aggressive gram-negative microflora. These bacteria produce toxins that are able to penetrate into the tissues and destroy the mucous membrane,

which leads to erosive changes in the epithelium.

The body tries to resist the damaging effect and in response triggers an inflammatory reaction in order to destroy pathogenic factors. In some cases, the immune system can cope with the microflora on its own, but more often the inflammation progresses or becomes chronic.

The destructive effect of microorganisms and the inflammatory process lead to a deterioration of microcirculation in the gums, a decrease in the activity of antioxidant defense mechanisms. This leads to an aggressive effect on the epithelium of the complement system factors (protective proteins circulating in the blood), which causes progressive destruction of the mucosa. In patients with immune defects, hormonal disorders, blood diseases, traumatic gum damage and thinned mucous membranes, soft tissues are more vulnerable, and the process of their destruction is more active.

If the pathological process is actively developing, the number of cells of the immune system (lymphocytes and macrophages) increases in the soft tissues. They destroy cells and fibrillar structures of the cytoplasm (rigid, parallel fibers that determine the shape of the cell). This leads to an expansion of the space between the gum and the tooth, and a thinning of the epithelial layer.

The inflammation can completely disappear with the onset of recovery, or become chronic. In the second case, the regeneration processes are disrupted, the epithelium is replaced by granulation tissue (connective tissue that forms during the healing of tissue defects), which can grow strongly, covering the crown of the tooth.

Classification and stages of gingivitis development

According to the International Classification of Diseases 10 revision (ICD-10), acute and chronic gingivitis are distinguished.:

1. In acute cases, the patient feels pain and discomfort, bleeding is common, and the soft tissues are hyperemic.

2. Chronic inflammation sometimes causes discomfort, the patient is concerned about bad breath, the edge of the gum is often thickened in the form of a roller. The chronic form of gingivitis is divided into the following types:

3. chronic without additional clarifications;

4. desquamative (with the appearance of bubbles on the gums);

5. Hyperplastic (manifested by gum growth);

6. simple marginal (affecting the edge of the gum);

7. Ulcerative.

According to the prevalence of the inflammatory process, gingivitis can be local or generalized (widespread). In the latter case, common symptoms are often detected in the form of fever and weakness.

According to the severity of the current:

• Mild mucosal lesions — only interdental papillae are affected.

• Moderate lesions — the free edge of the gum is involved in the inflammatory process.

• Severe mucosal lesions — the soft tissues attached to the tooth become inflamed.

According to morphological features:

• Catarrhal gingivitis. It is characterized by the release of a large amount of exudate, pronounced redness of the mucous membrane, swelling, soreness, and local fever.

• Hypertrophic gingivitis. The papillae between the teeth increase, and over time they can completely cover the crowns of the teeth. The gum acquires a bluish tinge, bleeds during meals, brushing teeth or during a dental examination, and deep gingival pockets form.

Ulcerative gingivitis. The mucous membrane acquires a gray tint, foci of destruction are visible.

Complications of gingivitis

Gingivitis is not as harmless a disease as it seems to some patients. Many people believe that the inflammation will pass by itself, leaving no trace. This is possible only with a small lesion and good immunity. It should be remembered that inflamed gums are a source of infection that can spread in the oral cavity and cause serious consequences. That is why, at the first symptoms, you need to seek medical help. The most common complications of gingivitis:

• ulcerative-necrotic changes of the mucous membrane;

• periodontitis (periodontal inflammation);

• periodontitis (inflammation of the connective ligament that fixes the tooth in the jaw bone);

• the spread of infection beyond the oral cavity.

In gingivitis, the oral mucosa is affected by the body's immune forces (lymphocytes and macrophages) and toxins secreted by bacteria. If the inflammatory process is not stopped in time, the epithelium will begin to collapse. In the initial stages, this process is reversible, but with a prolonged course of gum disease, the gum is hypertrophied due to granulation tissue. In this case, therapeutic treatment may be ineffective.

The microflora that has affected the gum can spread to periodontal tissues. This leads to shakiness of the teeth, and eventually to their loss. Thus, due to gum diseases, you can lose perfectly healthy teeth.

Forecast. Prevention

With the timely initiation of treatment of the disease, especially with catarrhal form (characterized by redness and swelling of the gums), the prognosis is always favorable. The soft tissues are fully restored, and when the cause of the inflammation is eliminated, it does not develop again.

With extensive damage and overgrowth of the gum, it is necessary to partially remove the gingival papillae, this can lead to exposure of the necks of the teeth. If such patients do not regularly take preventive measures, periodontitis develops rapidly.

If you do not undergo treatment, gum inflammation usually results in tooth loss. The microflora affects the periodontal tissues that fix the tooth, it begins to wobble and eventually falls out.

Patients with diabetes mellitus often have an unfavorable prognosis for gingivitis. Violation of microcirculation caused by the underlying disease leads to a violation of tissue trophism, slows down the regeneration processes. Such patients need constant supportive therapy, which slows down the onset of irreversible changes, as well as blood glucose control.

For the prevention of gingivitis, the following recommendations should be followed::

• brush your teeth regularly (2 times a day);

• use a brush with soft bristles;

• Use dental floss and mouthwash after meals.;

• Have your teeth professionally cleaned by a dentist every six months;

• do not miss scheduled visits to the doctor;

• timely treatment of caries;

• if the filling or crown injures the gum, contact your dentist immediately.;

• Avoid eating solid foods that injure the gums.

If bleeding gums is observed for more than three days, you do not need to self-medicate, you need to seek medical help. The initial stages of gingivitis can be cured quickly with local therapy. An advanced disease is difficult to treat and can have irreversible consequences.

REFERENCES

Asrorovna, X. N., Baxriddinovich, T. A., Bustanovna, I. N., Valijon O'g'li, D. S., & Qizi, T. K. F. (2021). Clinical Application Of Dental Photography By A Dentist. The American Journal of Medical Sciences and Pharmaceutical Research, 3(09), 10-13.

Ugli, A. A. A., & Bustanovna, I. N. (2024). STUDY OF THE CONDITION OF PARODONT IN PERIODONTITIS IN FETAL WOMEN. European International Journal of Multidisciplinary Research and Management Studies, 4(05), 149-156.

Kizi, J. O. A., & Bustanovna, I. N. (2024). FAMILIARIZATION WITH THE HYGIENIC ASSESSMENT OF THE CONDITION OF THE ORAL MUCOSA IN ORTHOPEDIC TREATMENT. European International Journal of Multidisciplinary Research and Management Studies, 4(05), 89-96.

Bustanovna, I. N. (2024). Determination of the Effectiveness of Dental Measures for the Prevention of Periodontal Dental Diseases in Workers of the Production of Metal Structures. International Journal of Scientific Trends, 3(5), 108-114.

Bustanovna, I. N. (2022). Assessment of clinical and morphological changes in the oral organs and tissues in post-menopause women. Thematics Journal of Education, 7(3).

Bustanovna, I. N., & Berdiqulovich, N. A. (2022). ПРОФИЛАКТИКА И ЛЕЧЕНИЯ КАРИЕСА У ПОСТОЯННЫХ ЗУБОВ. JOURNAL OF BIOMEDICINE AND PRACTICE, 7(1).

Bustanovna, I. N. (2024). PATHOGENESIS OF PERIODONTAL DISEASE IN ELDERLY WOMEN. Лучшие интеллектуальные исследования, 21(3), 25-29.

Bustanovna, I. N. (2024). TO STUDY THE HYGIENIC ASSESSMENT OF THE CONDITION OF THE ORAL MUCOSA DURING ORTHOPEDIC TREATMENT. Лучшие интеллектуальные исследования, 21(1), 9-15.

Bustanovna, I. N. (2024). CLINICAL AND LABORATORY CHANGES IN PERIODONTITIS. Journal of new century innovations, 51(2), 58-65.

Bustanovna, I. N. (2024). Morphological Changes in Oral Organs and Tissues in Women after Menopause and their Analysis. International Journal of Scientific Trends, 3(3), 87-93.

Bustanovna, I. N. (2024). Hygienic Assessment of The Condition of The Oral Mucosa After Orthopedic Treatment. International Journal of Scientific Trends, 3(3), 56-61.

Bustanovna, P. I. N. (2024). Further Research the Features of the Use of Metal-Ceramic Structures in Anomalies of Development and Position of Teeth. International Journal of Scientific Trends, 3(3), 67-71.

Bustanovna, I. N. (2024). The Effectiveness of the Use of the Drug" Proroot MTA" in the Therapeutic and Surgical Treatment of Periodontitis. International Journal of Scientific Trends, 3(3), 72-75.

Bustanovna, P. I. N. (2024). Research of the Structure of Somatic Pathology in Patients with Aphthous Stomatitis. International Journal of Scientific Trends, 3(3), 51-55.

Bustanovna, I. N., & Abdusattor o'g, A. A. A. (2024).

Analysis of Errors and Complications in the Use of Endocal Structures Used in Dentistry. International Journal of Scientific Trends, 3(3), 82-86.

Bustanovna, I. N. (2024). Complications Arising in the Oral Cavity after Polychemotherapy in Patients with Hemablastoses. International Journal of Scientific Trends, 3(3), 62-66.

Bustanovna, I. N., & Sharipovna, N. N. (2023). Research cases in women after menopause clinical and morphological changes in oral organs and their analysis. Journal of biomedicine and practice, 8(3).

Bustonovna, I. N., & Sharipovna, N. N. (2023). Essential Factors Of Etiopathogenesis In The Development Of Parodontal Diseases In Post-Menopasis Women. Eurasian Medical Research Periodical, 20, 64-69.

Fakhriddin, C. H. A. K. K. A. N. O. V., Shokhruh, S. A. M. A. D. O. V., & Nilufar, I. S. L. A. M. O. V. A. (2022). ENDOKANAL PIN-KONSTRUKSIYALARNI ISHLATISHDA ASORATLAR VA XATOLAR TAHLILI. JOURNAL OF BIOMEDICINE AND PRACTICE, 7(1).

Очилов, Х. У., & Исламова, Н. Б. (2024). Особенности артикуляции и окклюзии зубных рядов у пациентов с генерализованной формой повышенного стирания. SAMARALI TA'LIM VA BARQAROR INNOVATSIYALAR JURNALI, 2(4), 422-430.

Ortikova, N., & Rizaev, J. (2021, May). The Prevalence And Reasons Of Stomatophobia In Children. In E-Conference Globe (pp. 339-341).

Ortikova, N. (2023). ANALYSISOF ANESTHESIA METHODS FOR DENTAL FEAR AND ANXIETY. Центральноазиатский журнал академических исследований, 1(1), 8-12.

Ortikova, N. K. (2023). DENTAL ANXIETY AS A SPECIAL PLACE IN SCIENTIFIC KNOWLEDGE. SCHOLAR, 1(29), 104-112.

Исламова, Н. Б. (2024). ПАРОДОНТ КАСАЛЛИКЛАРИДА ОРГАНИЗМДАГИ УМУМИЙ ЎЗГАРИШЛАРНИ ТАҲЛИЛИ ВА ДАВОЛАШ САМАРАДОРЛИГИНИ ТАКОМИЛЛАШТИРИШ. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 43(7), 18-22.

Islamova, N. B., & Chakkonov, F. K. (2021). Changes in the tissues and organs of the mouth in endocrine diseases. Current Issues in Dentistry, 320-326.

Исламова, Н. Б., & Исломов, Л. Б. (2021). Особенности развития и течения заболеваний полости рта при эндокринной патологии. ББК, 56, 76.

Исламова, Н. Б., & Назарова, Н. Ш. (2023). СУРУНКАЛИ ТАРҚАЛГАН ПАРОДОНТИТ БИЛАН КАСАЛЛАНГАН ПОСТМЕНОПАУЗА ДАВРИДАГИ АЁЛЛАРНИНГ ПАРОДОНТ ТЎҚИМАСИНИНГ ДАВОЛАШ САМАРАДОРЛИГИ ОШИРИШ. ЖУРНАЛ СТОМАТОЛОГИИ И КРАНИОФАЦИАЛЬНЫХ ИССЛЕДОВАНИЙ, 4(2).

Исламова, Н. Б. (2024). ПАРОДОНТИТ КАСАЛЛИГИДА ОРГАНИЗМДАГИ УМУМИЙ ВА МАҲАЛЛИЙ ЎЗГАРГАН КЎРСАТКИЧЛАРНИНГ ТАҲЛИЛИ. Журнал гуманитарных и естественных наук, (8), 23-27.

Islamova, N. B., & Sh, N. N. (2023, May). STUDY OF CHANGES IN PERIODONTAL DISEASES IN POSTMENOPAUSAL WOMEN. In Conferences (pp. 15-17).

Исламова, Н. Б., & Назарова, Н. Ш. (2023, May). Совершенствование диагностики и лечения хронического генерализованного пародонтита у женщин в период постменопаузы. In Conferences (pp. 13-15).

Islamova, N. B., & Nazarova, N. S. (2023). IMPROVING THE DIAGNOSIS AND TREATMENT OF CHRONIC GENERALIZED PERIODONTITIS IN POSTMENOPAUSAL WOMEN. Conferences.

Исламова, Н. Б. (2023). Гемодинамика тканей пародонта зубов по данным реопародонтографии.

Исламова, Н. Б., & Назарова, Н. Ш. (2023). МЕТОДЫ ИССЛЕДОВАНИЯ ЗАБОЛЕВАНИЙ ПАРОДОНТА У ЖЕНЩИН, НАХОДЯЩИХСЯ В ПЕРИОДЕ ПОСТМЕНОПАУЗЫ. In АКТУАЛЬНЫЕ ВОПРОСЫ СТОМАТОЛОГИИ (pp. 334-338).

Исламова, Н. Б. (2024). Complications Arising in the Oral Cavity after Polychemotherapy in Patients with Hemablastosis. International Journal of Scientific Trends, 3(3), 76-81.

Islamova, N. B. (2022). CHANGES IN PERIODONTAL TISSUES IN THE POSTMENOPAUSAL PERIOD. In Стоматология-наука и практика, перспективы развития (pp. 240-241).

Назарова, Н., & Исломова, Н. (2022). Этиопатогенетические факторы развития заболеваний пародонта у женщин в периоде постменопаузы. Профилактическая медицина и здоровье, 1(1), 55-63.

Иргашев, Ш. Х., & Исламова, Н. Б. (2021). Применение и эффективность энтеросгеля при лечении генерализованного пародонтита. In Актуальные вопросы стоматологии (pp. 305-310).

Иргашев, Ш., Норбутаев, А., & Исламова, Н. (2020). Эффективность энтеросгеля при лечении генерализованного пародонтита у ликвидаторов последствий аварии на чернобыльской АЭС. Общество и инновации, 1(1/S), 656-663.

Исламова, Н. Б. (2016). Сравнительная оценка

противовоспалительных цитокинов крови в развитии заболеваний полости рта при гипотиреозе. Наука в современном мире: теория и практика, (1), 41-44.

Исламова, Н. Б., Шамсиев, Р. А., Шомуродова, Х. Р., & Ахмедова, Ф. А. (2014). Состояние кристаллообразующей функции слюны при различных патологиях. In Молодежь и медицинская наука в XXI веке (pp. 470-471).

Исламова, Н., & Чакконов, Ф. (2020). Роль продуктов перекисного окисления липидов и противовоспалительных цитокинов крови в развитии заболеваний полости рта при гипотиреозе. Общество и инновации, 1(1/s), 577-582.

Исламова, Н., Хаджиметов, А., & Шакиров, Ш. (2015). Роль продуктов перекисного окисления липидов и противовоспалительных цитокинов крови в развитии заболеваний полости рта при гипотиреозе. Журнал проблемы биологии и медицины, (1 (82)), 41-44.

Исламова, Н. Б., & Чакконов, Ф. Х. (2021). Изменения в тканях и органах рта при эндокринных заболеваниях. In Актуальные вопросы стоматологии (pp. 320-326).

Nazarova, N. S., & Islomova, N. B. (2022). postmenopauza davridagi ayollarda stomatologik kasalliklarining klinik va mikrobilogik ko ‘rsatmalari va mexanizmlari. Журнал" Медицина и инновации", (2), 204-211.

Nazarova, N. S., & Islomova, N. B. (2022). postmenopauza davridagi ayollarda stomatologik kasalliklarining klinik va mikrobilogik ko ‘rsatmalari va mexanizmlari. Журнал" Медицина и инновации", (2), 204-211.

Sulaymonova, Z. Z., & Islamova, N. B. (2023, May). TAKING IMPRESSIONS IN THE ORAL CAVITY AND THEIR REDUCTION. In Conferences (pp. 21-23).

Sharipovna, N. N., & Bustonovna, I. N. (2022). Etiopatogenetic factors in the development of parodontal diseases in post-menopasis women. The american journal of medical sciences and pharmaceutical research, 4(09).

Sarimsokovich, G. M. (2023). LATEST METHODS OF STUDY OF PERIODONTAL DISEASE IN WOMEN. European International Journal of Multidisciplinary Research and Management Studies, 3(10), 242-250.

DENTAL PROSTHETICS. Лучшие интеллектуальные исследования, 18(4), 31-35.

Содикова, Ш. А., & Исламова, Н. Б. (2021). Оптимизация лечебно-профилактических мероприятий при заболеваний пародонта беременных женщин с железодефицитной анемией. In Актуальные вопросы стоматологии (pp. 434-440).

Чакконов, Ф. Х. (2021). ЯТРОГЕННЫЕ ОШИБКИ В СТОМАТОЛОГИИ И ИХ ПРИЧИНЫ. In Актуальные вопросы стоматологии (pp. 925-930).

ЧАККОНОВ, Ф., САМАДОВ, Ш., & ИСЛАМОВА, Н. (2022). ENDOKANAL PIN-KONSTRUKSIYALARNI ISHLATISHDA ASORATLAR VA XATOLAR TAHLILI. ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ, 7(1).

Xusanovich, C. F., Orzimurod, T., Maruf, U., & Ollomurod, X. (2023). PROSTHETICS A COMPLETE REMOVABLE PROSTHESIS BASED ON IMPLANTS. European International Journal of Multidisciplinary Research and Management Studies, 3(11), 122-126.

Xusanovich, C. F., Sunnat, R., & Sherali, X. (2024). CLASP PROSTHESES–TECHNOLOGY IMPROVEMENT. European International Journal of Multidisciplinary Research and Management Studies, 4(03), 152-156.