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INFLUENCE OF SYSTEMIC DISEASES ON ORAL HEALTH

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АННОТАЦИЯ

Состояние полости рта находится в тесной взаимосвязи с общим соматическим здоровьем человека. Хронические системные заболевания оказывают значительное влияние на ткани и органы полости рта, изменяя характер течения стоматологических заболеваний и снижая эффективность стандартных методов лечения. В статье представлен обзор современных научных данных о влиянии эндокринных, сердечно-сосудистых, желудочно-кишечных, гематологических и иммунных заболеваний на состояние твердых тканей зубов, пародонта, слизистой оболочки полости рта и слюнных желез. Рассмотрены основные патогенетические механизмы развития стоматологических проявлений при соматической патологии. Подчёркнута необходимость междисциплинарного подхода в практике терапевтической стоматологии.

Ключевые слова: соматические заболевания; полость рта; пародонтит; кариес; слизистая оболочка; системная патология.

ANNOTATSIYA

Og‘iz bo‘shlig‘ining holati insonning umumiy somatik salomatligi bilan chambarchas bog‘liq. Surunkali tizimli kasalliklar og‘iz bo‘shlig‘i to‘qimalari va a’zolariga sezilarli ta’sir ko‘rsatib, stomatologik kasalliklarning kechish xususiyatini o‘zgartiradi va standart davolash usullarining samaradorligini pasaytiradi. Maqolada endokrin, yurak-qon tomir, oshqozon-ichak, gematologik va immunitet kasalliklarining tish qattiq to‘qimalari, parodont, og‘iz bo‘shlig‘i shilliq qavati va so‘lak bezlari holatiga ta’siri bo‘yicha zamonaviy ilmiy ma’lumotlar sharhi keltirilgan. Somatik patologiyada stomatologik ko‘rinishlar rivojlanishining asosiy patogenetik mexanizmlari ko‘rib chiqilgan. Terapevtik stomatologiya amaliyotida fanlararo yondashuv zarurligi ta’kidlandi.

Kalit so‘zlar: somatik kasalliklar; og‘iz bo‘shlig‘i; parodontit; kariyes; shilliq qavat; tizimli patologiya.

ANNOTATION

The condition of the oral cavity is closely related to the general systemic health of the individual. Chronic systemic diseases significantly affect oral tissues and organs, altering the course of dental diseases and reducing the effectiveness of conventional treatment approaches. This review article analyzes current scientific data on the influence of endocrine, cardiovascular, gastrointestinal, hematological and immune diseases on hard dental tissues, periodontal structures, oral mucosa and salivary glands. The main pathogenetic mechanisms underlying oral manifestations of systemic disorders are discussed. The importance of an interdisciplinary approach in therapeutic dentistry is emphasized.

Key words: systemic diseases; oral health; periodontitis; dental caries; oral mucosa; therapeutic dentistry.

Introduction. Oral health is increasingly recognized as an integral component of general health. The oral cavity represents a highly sensitive biological environment that rapidly responds to systemic metabolic, vascular and immune changes. In many cases, oral manifestations may precede the clinical diagnosis of systemic diseases, highlighting the diagnostic role of dental professionals.

In modern clinical practice, therapeutic dentists frequently manage patients with multiple chronic systemic conditions. These comorbidities often modify the clinical presentation, progression and prognosis of oral diseases. Therefore, understanding the relationship between systemic pathology and oral health is essential for improving diagnostic accuracy and treatment outcomes.

Aim. To analyze the influence of common systemic diseases on the condition of oral tissues and to identify the main pathogenetic mechanisms responsible for oral manifestations associated with systemic disorders.

Materials and Methods. This study is based on a narrative review of domestic and international scientific literature published in peer-reviewed journals. Clinical, epidemiological and experimental studies addressing the relationship between systemic diseases and oral health were analyzed using comparative and systematic approaches.

Results and Discussion. Endocrine Disorders and Oral Health Diabetes mellitus is one of the most extensively studied systemic conditions associated with oral pathology. Persistent hyperglycemia leads to microvascular damage, impaired immune response and delayed tissue regeneration. As a result, diabetic patients demonstrate an increased prevalence and severity of periodontal disease, xerostomia, oral candidiasis and complicated dental caries.

Thyroid dysfunction also influences oral tissues. Hypothyroidism is associated with delayed tooth eruption, enamel hypoplasia and reduced salivary flow, while hyperthyroidism may result in accelerated tooth wear and changes in bone metabolism.

Gastrointestinal Diseases. Chronic gastrointestinal disorders contribute to nutritional deficiencies and altered absorption of vitamins and trace elements essential for maintaining oral tissue integrity. Clinically, these conditions manifest as glossitis, angular cheilitis, recurrent aphthous stomatitis and increased caries susceptibility. Gastroesophageal reflux disease deserves special attention due to the erosive effect of gastric acid on dental enamel, leading to enamel demineralization and dentin hypersensitivity.

Cardiovascular Diseases. Patients with cardiovascular pathology often present with chronic inflammatory periodontal diseases. Impaired blood circulation and tissue hypoxia reduce

periodontal resistance to bacterial aggression. Moreover, chronic periodontal inflammation is increasingly recognized as a potential risk factor for atherosclerosis and cardiovascular events, suggesting a bidirectional relationship.

Hematological and Immune Disorders. Anemias are associated with pallor of the oral mucosa, atrophic glossitis and increased gingival bleeding. In patients with leukemia and immunodeficiency states, ulcerative-necrotic lesions, opportunistic infections and delayed wound healing are frequently observed, requiring careful dental management.

Conclusion. Systemic diseases exert a significant influence on the condition of oral tissues and the clinical course of dental diseases. Consideration of the patient's systemic health status is essential for effective diagnosis, prevention and treatment in therapeutic dentistry. Interdisciplinary collaboration between dentists and physicians of other specialties is a key factor in improving patient outcomes and overall quality of care.

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