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### OSTEOMYELITIS OF THE JAW AMONG PATIENTS WITH RENAL INSUFFICIENCY

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**Relevance:** Osteomyelitis of the jaw is a serious complication that can occur in patients with renal insufficiency. Under the influence of various factors, such as immunosuppression, impaired microcirculation and changes in bone metabolism, such patients have an increased risk of developing this disease.

The purpose of the study. In this article, we will look at the prevalence of this complication among this category of patients, identify the main risk factors contributing to its development, the main aspects of osteomyelitis of the jaw among patients with renal insufficiency, including the causes of development, diagnostic and treatment methods, as well as, and discuss possible solutions to this problem.

**Key words:** Osteomyelitis of the jaw, renal insufficiency, prevalence, risk factors, etiology, pathogenesis, diagnosis and treatment.

**DOLZARBLIGI**. Jagʻosteomiyeliti-buyrak yetishmovchiligi boʻlgan bemorlarda yuzaga kelishi mumkin boʻlgan jiddiy asorat. Immunosupressorlar, mikrosirkulyatsiyaning buzilishi va suyak metabolizmining oʻzgarishi kabi turli omillar ta'sirida bunday bemorlarda ushbu kasallikning rivojlanish xavfi ortadi.

Maqsad: Ushbu maqolada biz bu toifadagi bemorlar orasida quyidagi asoratning tarqalishini ko'rib chiqamiz, uning rivojlanishiga hissa qo'shadigan asosiy xavf omillarini, buyrak yetishmovchiligi bo'lgan bemorlar orasida jag' osteomiyelitining asosiy jihatlarini, shu jumladan rivojlanish sabablarini, diagnostikasini aniqlaymiz va davolash usullari, shuningdek, ushbu muammoni hal qilishning mumkin bo'lgan usullarini muhokama qilamiz.

**Kalit so'zlar:** Jag'ning osteomiyelit, buyrak yetishmovchiligi, tarqalishi, xavf omillari, etiologiya, patogenez, diagnostika va davolash.

**Актуальность.** Остеомиелит челюсти — серьезное осложнение, которое может возникнуть у больных с почечной недостаточностью. Под воздействием различных факторов, таких как иммуносупрессия, нарушение микроциркуляции и изменения костного метаболизма, у таких пациентов повышается риск развития этого заболевания.

**Цель исслежования:** В данной статье мы рассмотрим распространенность этого осложнения среди данной категории больных, выявим основные факторы риска, способствующие его развитию, основные аспекты остеомиелита челюсти среди больных с почечной недостаточностью, в том числе причины развития, диагностику. И методы лечения, а также и обсудить возможные пути решения этой проблемы.

**Ключевые слова:** Остеомиелит челюсти, почечная недостаточность, распространенность, факторы риска, этиология, патогенез, диагностика и лечение.

The prevalence of osteomyelitis of the jaw among patients with renal insufficiency. Patients with renal insufficiency have a significantly increased risk of developing osteomyelitis of the jaw compared to the general population. According to studies conducted in recent decades, approximately 10-20% of patients with chronic renal failure experience this complication. This is

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due to a number of factors, including immunosuppression, decreased bone mass, impaired microcirculation in bone tissue and changes in bone metabolism.

Risk factors contributing to the development of osteomyelitis of the jaw in patients with renal insufficiency. Despite the fact that osteomyelitis of the jaw can develop in any patient with renal insufficiency, some groups are at higher risk. Decreased immune function in patients with renal insufficiency makes them more vulnerable to infections, including bacterial infections of bones and soft tissues. Dialysis: In patients undergoing dialysis, there is a violation of blood circulation in the bones of the jaw due to violations of calcium and phosphorus metabolism, which contributes to the development of osteomyelitis. Drug use: Long-term use of medications, including antibiotics and drugs used in the treatment of kidney failure, may increase the risk of infectious complications. In addition, patients with diabetes mellitus and hypertension may also be at increased risk of developing osteomyelitis of the jaw due to disorders of bone metabolism and immunosuppression.

The etiology of osteomyelitis of the jaw in patients with renal insufficiency. The etiology of osteomyelitis of the jaw in patients with renal insufficiency is multifaceted and includes several main aspects. One of the key factors is immunosuppression, which develops as a result of a violation of the immune system in renal failure. This leads to a decrease in the body's resistance to infections, including infections of bones and joints. In addition, microcirculation disorders in bone tissue caused by renal insufficiency contribute to the development of hypoxia and create favorable conditions for the penetration of infection.

The pathogenesis of osteomyelitis of the jaw in patients with renal insufficiency. The pathogenesis of osteomyelitis of the jaw in patients with renal insufficiency is associated with a number of complex mechanisms that include inflammation, microcirculation disorders, changes in bone metabolism and an imbalance between bone remodeling and destruction. Inflammation plays a key role in the pathogenesis of osteomyelitis of the jaw, activating immune cells and attracting infection to bone tissue. Microcirculation disorders lead to hypoxia and disruption of the supply of oxygen and nutrients to bone cells, which increases their vulnerability to infection.

Diagnosis of osteomyelitis of the jaw in patients with renal insufficiency. Diagnosis of osteomyelitis of the jaw in patients with renal insufficiency presents certain difficulties due to the presence of many concomitant diseases and risk factors. However, several methods can help in making an accurate diagnosis. This includes computed tomography (CT) and magnetic resonance imaging (MRI), which allow you to visualize changes in bone tissue. Laboratory tests, such as a general blood test and biochemical analysis, can also be useful for detecting signs of inflammation and infection.

Treatment of osteomyelitis of the jaw in patients with renal insufficiency. Treatment of osteomyelitis of the jaw in patients with renal insufficiency includes a comprehensive approach aimed at eliminating infection, restoring bone tissue and maintaining kidney function. An important component of treatment is antibiotic therapy, which should be selected taking into account the sensitivity of microorganisms to antibiotics. Surgical intervention may be required if there is a purulent infection or destruction of bone tissue. In addition, patients may be prescribed drugs to maintain bone metabolism and complex therapy to improve immunity.

Ways to solve the problem. A comprehensive approach is needed to reduce the prevalence of osteomyelitis of the jaw among patients with renal insufficiency. It is important to conduct regular screening examinations of patients with a high risk of developing this complication, as well as

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regularly monitor the condition of the teeth and oral cavity. Special attention should be paid to the prevention of infections and the maintenance of immunity in patients, especially during hemodialysis. In addition, early detection and adequate treatment of infections associated with osteomyelitis of the jaw play a key role in reducing the prevalence of this complication.

Conclusion. Osteomyelitis of the jaw is a serious complication in patients with renal insufficiency, requiring comprehensive and timely treatment. Understanding the prevalence of this complication, risk factors and ways to solve the problem allows the medical community to develop effective prevention and treatment strategies that will help reduce the incidence of osteomyelitis of the jaw among this vulnerable category of patients. Diagnosis and treatment of this disease should be carried out under the supervision of experienced specialists, taking into account the specifics of each specific case. Early detection and adequate therapy will help prevent the development of complications and improve the prognosis in patients with renal insufficiency suffering from osteomyelitis of the jaw.

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