

## **CLINICAL AND IMMUNOLOGICAL ASPECTS OF PROGNOSIS AND PREVENTION OF GENERALIZATION OF INFECTION IN PATIENTS WITH CHRONIC WOUNDS**

**Umarov B.Ya.**  
**Khamdamov B.Z.**

Bukhara State Medical Institute, Republic of Uzbekistan, Bukhara  
<https://doi.org/10.5281/zenodo.14894038>

### **Аннотация**

The article deals with clinical and immunological aspects of prognosis and prevention of generalization of infection in patients with chronic non-healing wounds. Risk factors for infectious complications, mechanisms of inflammation, and features of the immune response in the context of long-term wound healing are discussed. Methods for diagnosing and monitoring the state of the immune system, as well as the principles of treatment and prevention of infection, including the use of antibacterial and immunomodulatory drugs, are described. Recommendations for optimizing approaches in the treatment and prevention of generalization of infection are proposed.

**Key words:** chronic wounds, generalization of infection, immune response, infection prevention, antibacterial therapy, inflammation, immunomodulation, clinical aspects.

### **Relevance**

Chronic non-healing wounds are a serious medical problem that requires a comprehensive approach to the treatment and prevention of infectious complications. Existing treatments often do not lead to complete healing, which increases the risk of generalization of infection, the development of sepsis and other serious diseases. An important role in preventing these complications is played by the patient's immunological status, which can significantly affect the rate of healing and the risk of infectious complications. The relevance of this work is determined by the need to develop new effective methods of diagnosis and therapy to prevent generalization of infection in such patients. The development of techniques aimed at strengthening the immune response and reducing the inflammatory process is crucial for improving the prognosis and quality of life of patients with chronic wounds.

### **Objective**

The aim of the study is to assess the clinical and immunological factors affecting the generalization of infection in patients with chronic non-healing wounds, as well as to develop effective methods for the prevention and treatment of infectious complications.

### Materials and methods

The study used clinical data from 50 patients with chronic non-healing wounds treated in dermatological and surgical clinics. The research methods included clinical examination, laboratory blood tests (including indicators of inflammation and immune response), microbiological examination of wound material, as well as immunological tests to assess the state of the immune system. Standard regimens of antibacterial therapy were used, as well as therapy aimed at correcting the immune status of patients.

### Results

The results showed that the majority of patients with chronic wounds show a marked decrease in the activity of cellular and humoral immunity. A high rate of infection of wound surfaces with many pathogenic microorganisms, including antibiotic-resistant strains, was also revealed. The use of combination therapy, including antibacterial drugs and immunomodulators, helped to accelerate wound healing and reduce the risk of generalization of infection. In most cases, there was an improvement in the clinical condition, a decrease in the level of inflammation, and normalization of immune response indicators.

### Conclusion

The studied clinical and immunological aspects confirm the importance of an integrated approach in the treatment of chronic non-healing wounds. Prevention of generalization of infection in such patients requires not only the use of antibacterial agents, but also correction of the immune status. The use of immunomodulatory drugs improves wound healing and reduces the frequency of infectious complications. The results of the study emphasize the need for an individual approach to each patient, taking into account the characteristics of the immune system and infectious background.

### Literature:

1. Кулдашев Д. Р., Хошимов Б. Л. Морфологическая характеристика репаративной регенерации костной ткани под влиянием цикло-3-форта сравнительно с остеогеноном при экспериментальных костных дефектах //Врач-аспирант. – 2011. – Т. 47. – №. 4.4. – С. 619-624.
2. Хошимов Б. Л. МОРФОЛОГИЧЕСКИЕ ИЗМЕНЕНИЕ СОСУДОВ ПРИ ЭКСПЕРИМЕНТАЛЬНОМ САХАРНОМ ДИАБЕТЕ //PEDAGOGS. – 2024. – Т. 52. – №. 2. – С. 13-17.
3. Khoshimov B. L., Akhmedova S. M. METABOLIK SINDROMDA BIOKIMYOVIY O 'ZGARISHLAR VA QON TOMIRLARDAGI MORFOLOGIK O 'ZGARISHLAR BOG 'LIQLIGI //Журнал гуманитарных и естественных наук. – 2024. – №. 14 [1]. – С. 183-189.

4. Хошимов Б. Л., Ахмедова С. М. АТЕРОСКЛЕРОЗ СОСУДОВ — ПРОЯВЛЕНИЕ ОСЛОЖНЕНИЙ МЕТАБОЛИЧЕСКОГО СИНДРОМА // КОНФЕРЕНЦИЯ «РОЛЬ И ЗНАЧЕНИЕ НАУКИ В СОВРЕМЕННОМ МИРЕ». — 2024. — Т. 1. — №. 8. — С. 10-15.
5. Лукмонович К. Б., Мухамадовна А. С. Реактивные изменения в аорте при экспериментальном метаболическом синдроме // Журнал «Биомедицина и практика». – 2024. – Т. 9. – №. 2.



**WOC**  
WORLD  
ONLINE  
CONFERENCES

