

AN APPROACH BASED ON LICORICE EXTRACT IN THE
TREATMENT OF PROSTHESIS-RELATED CHANGES OF
THE ORAL MUCOSA

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Annotation: *Despite the rapid development of modern dentistry, effective prosthetic rehabilitation of patients requiring removable dentures remains an important issue. Although removable dentures have significant functional and aesthetic value, they continuously exert mechanical, chemical, and physical effects on the oral mucosa. Despite its high regenerative capacity, the mucosa may develop inflammatory and other pathological changes under the influence of these factors and pathogenic microorganisms. Therefore, improving the treatment of mucosal diseases associated with removable dentures is of significant scientific and practical importance.*

Keywords: *inflammatory process, prosthetic stomatitis, regeneration, licorice extract, epithelialization rate.*

Introduction: The oral mucosa is resistant to physical, thermal, and chemical influences and has a high regenerative capacity. However, despite its protective functions, various diseases are common, and their treatment remains one of the urgent problems in dentistry. According to the World Health Organization, more than 90% of the middle-aged population suffers from oral mucosal and periodontal diseases.

Main part: The study was conducted at the Bukhara State Medical Institute, involving 149 patients requiring removable dentures in 2024–2025. The patients were divided into three groups (control, conventional treatment, and modern treatment) and evaluated before prosthetic treatment and after 1 week, 1 month, and 3 months. Clinical assessment included hyperemia, epithelialization, discomfort, and prosthetic stomatitis, as well as salivary pH levels and laboratory parameters.

Prosthetic stomatitis is an inflammatory condition associated with mechanical irritation and microbial imbalance. In this study, licorice extract showed effective results. Treatment reduced inflammation, accelerated epithelialization, and led to mucosal recovery within one month, while salivary pH levels approached normal values.

Compared with conventional therapy, modern treatment provided faster recovery, reduced discomfort, and better adaptation to dentures. This demonstrates the effectiveness of plant-based extracts in the treatment of prosthetic stomatitis.

Conclusion: The results showed improvement in oral mucosal condition during prosthetic treatment, including reduced hyperemia, swelling, and pain, as well as improved denture adaptation. Proper prosthesis fabrication and oral hygiene are essential. With licorice extract, 78% of patients reported pain reduction to 0–3 on the VAS scale, inflammation decreased within 14 days, and complete recovery was observed in 85% of cases. *Streptococcus mutans* and *Candida albicans* were reduced by 2.5–3 times, and 90% of patients showed improved adaptation. The results confirm the effectiveness of *Glycyrrhiza glabra* extract in the treatment of prosthetic stomatitis.

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