

PAPER

CLINICAL EFFECTIVENESS OF THE DIETARY SUPPLEMENT OREGANO AS IN INFLAMMATORY DISEASES OF THE ORAL CAVITY

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Abstract

Inflammatory diseases of the oral cavity, such as stomatitis and gingivitis, are among the most common conditions in dental practice and often require long-term and комплекс treatment approaches. In recent years, increasing attention has been paid to the integration of traditional medicine with modern therapeutic methods. This study aimed to evaluate the clinical effectiveness of the dietary supplement Oregano As, prepared from a 1:1 mixture of *Salvia officinalis* and *Origanum titthanthum*, in the management of inflammatory diseases of the oral cavity. The study included 50 patients diagnosed with stomatitis and gingivitis who were divided into a control group (n = 25), receiving conventional dental treatment, and an experimental group (n = 25), receiving standard therapy combined with Oregano AS. Clinical symptoms such as pain, swelling, redness, and bleeding were assessed over a 10-day treatment period. The results demonstrated a significant reduction in inflammatory symptoms in the experimental group, with 95% of patients showing complete clinical improvement compared to 60% in the control group. Symptom relief occurred faster in the experimental group, and enhanced oral mucosal regeneration and improved immune status were observed. These findings indicate that Oregano As exhibits pronounced anti-inflammatory, antiseptic, and regenerative effects and may serve as an effective adjunct to conventional dental therapy.

Key words: Oregano As; dietary supplement; inflammatory diseases of the oral cavity; stomatitis; gingivitis; phytotherapy; *Salvia officinalis*; *Origanum titthanthum*; clinical effectiveness; integrative medicine.

Introduction

Medicinal plants have long played a crucial role in maintaining human health and in the treatment

of various diseases. Even today, nearly 50% of pharmaceutical products manufactured worldwide are derived from medicinal plant raw materials. Currently, more than 50,000 medicinal plants

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are used in modern medicine and traditional healing practices for the treatment and prevention of diseases. In Uzbekistan, approximately 4,500 species of higher plants grow naturally, of which nearly 1,200 exhibit medicinal properties. At present, 112 species of medicinal plants are officially approved for use in modern medicine in the Republic, with about 80% being wild-growing species. The use of medicinal plants rich in biologically active compounds is of great importance in improving public health. Among such plants widely distributed in Uzbekistan are *Salvia officinalis* (sage) and *Origanum titthanthum* (oregano). These plants are well known for their anti-inflammatory, antiseptic, and antioxidant properties and are widely applied in both traditional medicine and modern healthcare. A dietary supplement named Oregano As, prepared by mixing *Salvia officinalis* and *Origanum titthanthum* leaves in a 1:1 ratio, represents a promising approach for integrating phytotherapy with modern dentistry in the management of inflammatory diseases of the oral cavity.

Materials and methods

In this study, the leaves of *Salvia officinalis* and *Origanum titthanthum* were dried, finely ground, and mixed in a 1:1 ratio. The resulting mixture was formulated as the dietary supplement Oregano As.

Clinical investigations were conducted in accordance with the hygienic certificate No. N-022669 and technical guideline TY 303271760-010:2024 issued by the Tashkent City Department of the Committee for Sanitary-Epidemiological Welfare and Public Health.

The clinical study was carried out at the dental department of the Qo'shtepa District Medical Association in Fergana region. A total of 50 patients diagnosed with stomatitis and gingivitis voluntarily participated in the study and were divided into two groups: Control group (n = 25): treated with conventional dental preparations (chlorhexidine and Metrogyl Denta). Experimental group (n = 25): received standard dental treatment combined with oral rinsing using Oregano As solution and oral intake of the dietary supplement. The treatment period lasted 10 days. Clinical symptoms including pain, swelling, redness, and bleeding were monitored dynamically.

Results

At the end of the 10-day observation period, the following results were recorded: In the control group, inflammatory symptoms were reduced in 60% of cases. In the experimental group, inflammatory symptoms were eliminated in 95% of cases. Subjective complaints such as pain and burning sensation decreased more rapidly in the experimental group (within 4–5 days) compared to the control group (8–10 days). Additionally, the use of Oregano AS contributed to softening of the oral mucosa, accelerated tissue regeneration, and improvement of the patients' immune status.

Discussion

The obtained results demonstrate the high effectiveness of the Oregano As phytocomposition in the treatment of inflammatory diseases of the oral cavity. The essential oils, flavonoids, and phenolic compounds present in *Salvia officinalis* exhibit pronounced anti-inflammatory and antimicrobial effects. Meanwhile, *Origanum titthanthum* contains thymol, carvacrol, and rosmarinic acid, which possess strong antiseptic and antioxidant properties.

Furthermore, analysis of Oregano AS revealed high levels of magnesium (Mg), vitamin B₂, and the amino acid histidine, which may contribute to immune support and improvement of nervous system function. When used in combination with modern dental treatments, a synergistic therapeutic effect was observed.

Conclusion

Inflammatory diseases of the oral cavity are common conditions, and integration of traditional phytotherapy with modern dentistry is an effective therapeutic strategy. The dietary supplement Oregano As, prepared from *Salvia officinalis* and *Origanum titthanthum*, demonstrated significant anti-inflammatory and antiseptic activity. Combined use of Oregano AS with conventional dental treatments accelerated oral mucosal healing and enhanced immune function. Further large-scale clinical studies and development of new phytotherapeutic products based on Oregano AS are перспективные направления for future clinical application.

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