

New Study Suggests Shift Towards Antioxidants in Post-Surgery Periodontal Therapy

HOUSTON, TEXAS, UNITED STATES, July 31, 2024 /EINPresswire.com/ -- A recent study published in the Journal of Periodontology reveals that Periosciences AO Provantage gel, an antioxidant gel, significantly enhances post-surgical periodontal wound healing compared to the traditional use of chlorhexidine (CHX). Conducted by researchers from Texas A&M School of Dentistry, this study promises to revolutionize periodontal therapy and improve patient care.

The research team, led by Dr. Kelechi Ukaegbu, included Deborah Foyle, Xianghong Luan, Emet Schneiderman, Edward P. Allen, Jacqueline Plemons, and Kathy K. H. Svoboda. Their objective was to compare the healing effects of the antioxidant gel with those of chlorhexidine following mucogingival surgery.

The study involved creating surgical wounds in the lower incisors of 60 Sprague–Dawley rats, followed by treatment with either AO gel, 0.12% CHX, or no treatment (control). Clinical evaluations, tissue samples, and gene expression analyses were conducted at 24 and 72 hours post-surgery. The results showed that the AO gel significantly outperformed CHX and the control group. The AO-treated animals exhibited higher expression of the antioxidant enzyme superoxide dismutase (SOD) and earlier upregulation of tumor necrosis factor-alpha (TNF α), leading to faster and more effective healing.

Dr. Ukaegbu highlighted the importance of the study: "Our research demonstrates the potential of Periosciences AO Provantage antioxidant gel in enhancing the healing process, which could revolutionize periodontal therapy. This study provides a solid foundation for further clinical trials and could significantly impact how we manage post-surgical care in dentistry."

The implications of this study are profound. Unlike chlorhexidine, which is cytotoxic and can induce oxidative stress, the antioxidant properties of AO gel help counteract oxidative stress, a critical factor in wound healing.

These findings could lead to improved patient care, offering a more effective and less harmful post-surgical treatment option.

The findings have already garnered attention from the dental community, and further studies are being planned to explore the potential of antioxidants in other areas of periodontal

therapy.

Source: <https://aap.onlinelibrary.wiley.com/doi/10.1002/JPER.23-0794>

Dr Kelechi Ukaegbu

Periodontist

[email us here](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/730182366>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2024 Newsmatics Inc. All Right Reserved.