

Preliminary Report on the Effects of Propolis on Wound Healing in the Dental Pulp

Walter A. Bretz^a, D. J. Chiego, Jr.^b, M. C. Marcucci^c, I. Cunha^d, A. Custódio^d, L. G. Schneider^a

^a University of Pittsburgh, School of Dental Medicine, 3501 Terrace Street, Pittsburgh, PA 15261–1923, USA

^b University of Michigan, School of Dentistry, Ann Arbor, MI 48109, USA

^c Bandeirante University of São Paulo, Pharmacy and Biochemistry Department, São Paulo, SP 02071–013, Brazil

^d Universidade São Francisco, School of Pharmaceutical Sciences, Bragança Paulista, SP 12900–000, Brazil

Z. Naturforsch. **53c**, 1045–1048 (1998); received May 29/August 3, 1998

Propolis, Dental Pulp, Wound Healing, Antimicrobial

The purpose of this investigation was to determine the antimicrobial and healing potential of propolis on direct dental pulp exposures. This study used 25 adult male rats. Pulp exposures were performed and animals were allocated to propolis and calcium hydroxide (Ca(OH)₂) groups. Animals were killed on days 5, 7, 10, and 14. The teeth were routinely processed for histological evaluation. Non-parametric tests were employed to analyze the data. No significant differences were found between study groups on the wound healing of the dental pulp. Both substances were comparable in exhibiting normal reorganization of the pulp and no increased vascularity, and were equally efficacious in maintaining a low inflammatory and microbial cell population as well as in stimulating the formation of reparative dentin.

Reprint requests to Walter A. Bretz. Fax: 412-3837796. E-mail: Wab2+@pitt.edu