Oral Health & Maxillofacial Surgery

December 05-06, 2016 Madrid, Spain

Biocompatibility and biomineralization assessment of resinous root canal sealers

Eloi DEZAN-JUNIOR

UNESP Aracatuba Dental College, Brazil

The aim of this study was to evaluate the rat subcutaneous tissue response to implanted polyethylene tubes lled with SK Seal Root Canal Sealer, Sealer 26° and AH plus° and investigate biomineralization ability of these endodontic sealers. Twenty four Wistar rats were assigned to the three sealers groups and control group, (n=6 animals/group) and received subcutaneous implants containing the test sealers, and the control group were implanted with empty tubes. After days 7, 15, 30, and 60, animals were euthanized and polyethylene tubes were removed with the surrounding tissues. Infammatory infltrate and thickness of the brous capsule were histologically evaluated. Mineralization was analyzed by Von Kossa staining and polarized light. Data were tabulated and analyzed via Kruskal-Wallis and Dunn's test. All tested materials induced a moderate infammatory reaction in the initial periods. No difference was observed among groups after days 30 or 60. At the end of the experiment, all tested sealers were found to be biocompatible. None of sealers induced biomineralization. We conclude that all tested sealers showed biocompatibility, but not stimulated the mineralization.

Biography

Eloi Dezan Junior is professor of Endodontics at UNESP Aracatuba Dental College since 1994. He has completed his PhD in 2001 at Sao Paulo University, Bauru School of Dentstry. He supervises graduates, Undergraduates, and postgraduates students. He is the graduation coordinator of Aracatuba Dental College. He has published more than 150 papers in reputed journals.

ksh@jnu.ac.kr

Notes: