



CONSORT Randomized Clinical Trial

[A Prospective Randomized Controlled Study of Mineral Trioxide Aggregate and Super Ethoxy-Benzoic Acid as Root-end Filling Materials in Endodontic Microsurgery](#) Minju Song, Euseong Kim

Clinical Research

[Clinical Diagnosis of Pulp Inflammation Based on Pulp Oxygenation Rates Measured by Pulse Oximetry](#) Frank C. Setzer, Simony Hidee Hamoy Kataoka, Fernanda Natrielli, Eudes Gondim-Junior, Celso Luiz Caldeira

[Endodontic Working Length Measurement with Preexisting Cone-Beam Computed Tomography Scanning: A Prospective, Controlled Clinical Study](#) Franziska B. Jeger, Simone F.M. Janner, Michael M. Bornstein, Adrian Lussi

[A Microbiological Profile of Unexposed and Exposed Pulp Space of Primary Endodontic Infections by Checkerboard DNA-DNA Hybridization](#) Luciana M. Sassone, Rivail A. Fidel, Marcelo Favéri, Luciene Figueiredo, Sandra R. Fidel, Magda Feres

Basic Research: Biology

[Extracellular Dextran and DNA Affect the Formation of *Enterococcus faecalis* Biofilms and Their Susceptibility to 2% Chlorhexidine](#) Weilan Li, Hongyan Liu, Qiong Xu

[The Role of SIRT1 on Angiogenic and Odontogenic Potential in Human Dental Pulp Cells](#) Jong-Jin Kim, Sun-Ju Kim, Young-Suk Kim, Sun-Young Kim, Sang-Hyuck Park, Eun-Cheol Kim

[Hypophosphatasia-associated Deficiencies in Mineralization and Gene Expression in Cultured Dental Pulp Cells Obtained from Human Teeth](#) Thaisângela L. Rodrigues, Brian L. Foster, Karina G. Silverio, Luciane Martins, Marcio Z. Casati, Enilson A. Sallum, Martha J. Somerman, Francisco H. Nociti

[Experimental Formation of Dentin-like Structure in the Root Canal Implant Model Using Cryopreserved Swine Dental Pulp Progenitor Cells](#) Kostas Kodonas, Christos Gogos, Serafim Papadimitriou, Kokona Kouzi-Koliakou, Dimitrios Tziafas

[Identification of Novel Function of Vimentin for Quality Standard for Regenerated Pulp Tissue](#) Masashi Murakami, Kiyomi Imabayashi, Atsushi Watanabe, Norio Takeuchi, Ryo Ishizaka, Koichiro Iohara, Tsubasa Yamamoto, Hiroshi Nakamura, Misako Nakashima

[Antimicrobial Substantivity over Time of Chlorhexidine and Cetrimide](#) Pilar Baca, Pilar Junco, María Teresa Arias-Moliz, Francisca Castillo, Alberto Rodríguez-Archilla, Carmen María Ferrer-Luque

[Hyperosmotic Stress Induces Cell Death in an Odontoblast-lineage Cell Line](#) Mari Fujisawa, Masayuki Tokuda, Yoko Morimoto-Yamashita, Shoko Tatsuyama, Szilvia Arany, Toshihiro Sugiyama, Chiaki Kitamura, Yoshiyuki Shibukawa, Mitsuo Torii

[Effects of an Experimental Calcium Aluminosilicate Cement on the Viability of Murine Odontoblast-like Cells](#) Wei Wei, Yi-pin Qi, Sergey Y. Nikonov, Li-na Niu, Regina L.W. Messer, Jing Mao, Carolyn M. Primus, David H. Pashley, Franklin R. Tay

[Protective Effect of Metformin on Periapical Lesions in Rats by Decreasing the Ratio of Receptor Activator of Nuclear Factor Kappa B Ligand/Osteoprotegerin](#) Lingshuang Liu, Chi Zhang, Yajing Hu, Bin Peng

[The Effect of Detergents on the Antibacterial Activity of Disinfecting Solutions in Dentin](#)

Zhejun Wang, Ya Shen, Jingzhi Ma, Markus Haapasalo

[Bacterial Flora and Extraradicular Biofilm Associated with the Apical Segment of Teeth with Post-treatment Apical Periodontitis](#)

Juan Wang, Yuntao Jiang, Wu Chen, Cailian Zhu, Jingping Liang

[The Effects of Tumor Necrosis Factor- \$\alpha\$ on Mineralization of Human Dental Apical Papilla Cells](#)

Haibing Yang, Li Ma, Xuan Han, Lin Yang, Cheng Tian, Yan Wang

Technology

[Accuracy of Cone-Beam Computed Tomography and Periapical Radiography in Detecting Small Periapical Lesions](#)

Patrick Tsai, Mahmoud Torabinejad, Dwight Rice, Bruno Azevedo

[Mineral Trioxide Aggregate-based Endodontic Sealer Stimulates Hydroxyapatite](#)

[Nucleation in Human Osteoblast-like Cell Culture](#) Loise Pedrosa Salles, Ana Livia Gomes-Cornélio, Felipe Coutinho Guimarães, Bruno Schneider Herrera, Sonia Nair Bao, Carlos Rossa-Junior, Juliane Maria Guerreiro-Tanomaru, Mario Tanomaru-Filho

[Root and Root Canal Morphology of Four-rooted Maxillary Second Molars: A Micro-Computed Tomography Study](#)

Marco Aurélio Versiani, Jesus Djalma Pécora, Manoel Damiano de Sousa-Neto

[Synthesis and Preliminary Evaluation of a Polyolefin-based Core for Carrier-based Root Canal Obturation](#)

Raghad Abdulrazzaq Alhashimi, Francesco Mannocci, Richard M. Foxton, Sanjukta Deb

[Cyclic Fatigue of Nickel-Titanium Rotary Instruments in a Double \(S-shaped\) Simulated Curvature](#)

Dina Al-Sudani, Nicola M. Grande, Gianluca Plotino, Giorgio Pompa, Stefano Di Carlo, Luca Testarelli, Gianluca Gambarini

[A Comparison of Apical Transportation between ProFile and RaCe Rotary Instruments](#)

Marc García, Fernando Duran-Sindreu, Montse Mercadé, Rufino Bueno, Miguel Roig

[A Comparison of Apical Transportation between FlexMaster and Twisted Files Rotary Instruments](#)

Fernando Duran-Sindreu, Marc García, Juan Gonzalo Olivieri, Montse Mercadé, Sergio Morelló, Miguel Roig

[Geometric Analysis of Root Canals Prepared by Four Rotary NiTi Shaping Systems](#)

Ahmed Abdel Rahman Hashem, Angie Galal Ghoneim, Reem Ahmed Lutfy, Manar Yehia Foda, Gihan Abdel Fatah Omar

[Effect of Sodium Fluorosilicate on the Properties of Portland Cement](#)

Keith S. Appelbaum, Jeffrey T. Stewart, Gary R. Hartwell

[Removal of Gutta-percha from Root Canals Using the Self-Adjusting File](#)

Kathelijin C. Voet, Min-Kai Wu, Paul R. Wesselink, Hagay Shemesh

Case Report/Clinical Techniques

[Treatment of a Perforating Inflammatory External Root Resorption with Mineral Trioxide Aggregate and Histologic Examination after Extraction](#)

Juan Gonzalo Olivieri, Fernando Duran-Sindreu, Montse Mercadé, Noelia Pérez, Miguel Roig