

CONSORT Randomized Clinical Trial

[Effect of Occlusal Reduction on Postoperative Pain in Teeth with Irreversible Pulpitis and Mild Tenderness to Percussion](#)

Masoud Parirokh, Ali Reza Rekabi, Rezvan Ashouri, Nouzar Nakhaee, Paul Vincent Abbott, Hedayat Gorjestani

[Efficacy of Articaine versus Lidocaine in Block and Infiltration Anesthesia Administered in Teeth with Irreversible Pulpitis: A Prospective, Randomized, Double-blind Study](#)

Hengameh Ashraf, Majeed Kazem, Omid Dianat, Fatemeh Nogrehkar

Review Article

[Comparison of Fracture Resistance between Cast Posts and Fiber Posts: A Meta-analysis of Literature](#)

Lili Zhou, Qing Wang

Clinical Research

[Pixel Intensity and Fractal Dimension of Periapical Lesions Visually Indiscernible in Radiographs](#)

Elif Soğur, B. Güniz Baksı, Hans-Göran Gröndahl, B. Hakan Şen

[Treatment Outcome of Mineral Trioxide Aggregate in Open Apex Teeth](#)

Johannes Mente, Meltem Leo, Dimos Panagidis, Marc Ohle, Sven Schneider, Justo Lorenzo Bermejo, Thorsten Pfefferle

[Occurrence of Cervical Invasive Root Resorption in First and Second Molar Teeth of Orthodontic Patients Eight Years after Bracket Removal](#)

Andrea Thönen, Timo Peltomäki, Raphael Patcas, Matthias Zehnder

[Isolation and Characterization of Dental Pulp Stem Cells from a Patient with Papillon–Lefèvre Syndrome](#)

Pakize Neslihan Taşlı, Sıdıka Tapşın, Sezin Demirel, Mehmet Emir Yalvaç, Serap Akyuz, Aysen Yarat, Fikrettin Şahin

Basic Research

Biology

[Streptococcus gordonii Collagen-binding Domain Protein CbdA May Enhance Bacterial Survival in Instrumented Root Canals Ex Vivo](#)

Peter J. Moses, Daniel A. Power, Amy M. Jesionowski, Howard F. Jenkinson, Eugene A. Pantera, M. Margaret Vickerman

[Identification of the Genes Involved in the Biofilm-like Structures on Actinomyces oris K20, a Clinical Isolate from an Apical Lesion](#)

Chiho Mashimo, Hiroyuki Kamitani, Takayuki Nambu, Kazuyoshi Yamane, Takeshi Yamanaka, Chieko Sugimori-Shinozuka, Toshiaki Tatami, Junichi Inoue, Maki Kamei, Shosuke Morita, Kai-Poon Leung, Hisanori Fukushima

[Development of an Ex Vivo Coculture System to Model Pulpal Infection by Streptococcus anginosus Group Bacteria](#)

Jessica L. Roberts, Jean-Yves Maillard, Rachel J. Waddington, Stephen P. Denyer, Christopher D. Lynch, Alastair J. Sloan

[Camphorquinone Inhibits Odontogenic Differentiation of Dental Pulp Cells and Triggers Release of Inflammatory Cytokines](#)

Reuben H. Kim, Drake W. Williams, Susan Bae, Rachel S. Lee, Ju-Eun Oh, Shebli Mehrazarin, Tony Kim, Ki-Hyuk Shin, No-Hee Park, Mo K. Kang

[Regulation of Matrix Metalloproteinases, Tissue Inhibitor of Matrix Metalloproteinase-1, and Extracellular](#)

[Metalloproteinase Inducer by Interleukin-17 in Human Periodontal Ligament Fibroblasts](#)

Yan Wu, Lingxin Zhu, Hongxia Wei, Bin Peng

[Calcium Ions Released from Mineral Trioxide Aggregate Convert the Differentiation Pathway of C2C12 Cells into Osteoblast Lineage](#)

Sakurako Matsumoto, Makoto Hayashi, Yusuke Suzuki, Naoto Suzuki, Masao Maeno, Bunnai Ogiso

[Combined Effects of Simvastatin and Enamel Matrix Derivative on Odontoblastic Differentiation of Human Dental Pulp Cells](#)

Lorena Karanxha, Su-Jung Park, Won-Jun Son, Jacques E. Nör, Kyung-San Min

[Evidence Supporting a Protective Role for Th9 and Th22 Cytokines in Human and Experimental Periapical Lesions](#)

Andreza Maria Fabio Aranha, Carlos Eduardo Repeke, Thiago Pompermaier Garlet, Andreia Espindola Vieira, Ana Paula Campanelli, Ana Paula Favaro Trombone, Ariadne Letra, Renato Menezes Silva, Gustavo Pompermaier Garlet

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[Detection of Dentinal Microcracks Using Infrared Thermography](#)

Manami Matsushita-Tokugawa, Jiro Miura, Yukiteru Iwami, Takahide Sakagami, Yui Izumi, Naoya Mori, Mikako Hayashi, Satoshi Imazato, Fumio Takeshige, Shigeyuki Ebisu

[Comparison of the Self-Adjusting File with Rotary and Hand Instrumentation in Long-oval-shaped Root Canals](#)

Jim E. Ruckman, Brian Whitten, Christine M. Sedgley, Timothy Svec

[Comparative Evaluation of Fracture Resistance under Static and Fatigue Loading of Endodontically Treated Teeth Restored with Carbon Fiber Posts, Glass Fiber Posts, and an Experimental Dentin Post System: An *In Vitro* Study](#)

Khetarpal Ambica, Kavitha Mahendran, Sangeeta Talwar, Mahesh Verma, Govindaswamy Padmini, Ravishankar Periasamy

[Torsion and Bending Properties of Shape Memory and Superelastic Nickel-Titanium Rotary Instruments](#)

Elizabeth Ninan, David W. Berzins

[Cold Plasma Therapy of a Tooth Root Canal Infected with *Enterococcus faecalis* Biofilms *In Vitro*](#)

Jie Pan, Ke Sun, Yongdong Liang, Peng Sun, Xiaohui Yang, Jing Wang, Jue Zhang, Weidong Zhu, Jing Fang, Kurt H. Becker

[The Effect of Various Mixing and Placement Techniques on the Compressive Strength of Mineral Trioxide Aggregate](#)

Fatima B. Basturk, Mohammad Hossein Nekoofar, Mahir Günday, Paul M. Dummer

[Antimicrobial Activity of Triantibiotic Paste, 2% Chlorhexidine Gel, and Calcium Hydroxide on an Intraoral-infected Dentin Biofilm Model](#)

Ronald Ordinola-Zapata, Clovis M. Bramante, Paloma Gagliardi Minotti, Bruno Cavalini Cavenago, Roberto Brandão Garcia, Norberti Bernardineli, David E. Jaramillo, Marco A. Hungaro Duarte

[Effect of Apical Size and Taper on Volume of Irrigant Delivered at Working Length with Apical Negative Pressure at Different Root Curvatures](#)

Cesar de Gregorio, Ana Arias, Natalia Navarrete, Veronica del Rio, Enrique Oltra, Nestor Cohenca

[Time Required to Remove GuttaCore, Thermafil Plus, and Thermoplasticized Gutta-percha from Moderately Curved Root Canals with ProTaper Files](#)

Robert T. Beasley, Anne E. Williamson, Bruce C. Justman, Fang Qian

[Incidence of Apical Root Cracks and Apical Dentinal Detachments after Canal Preparation with Hand and Rotary Files at Different Instrumentation Lengths](#)

Rui Liu, Anjali Kaiwar, Hagay Shemesh, Paul R. Wesselink, Benxiang Hou, Min-Kai Wu

[Influence of Combined Cyclic Fatigue and Torsional Stress on the Fracture Point of Nickel-Titanium Rotary Instruments](#)

Frank C. Setzer, Christian P. Böhme

Case Report/Clinical Techniques

[Histological Findings of Revascularized/Revitalized Immature Permanent Molar with Apical Periodontitis Using Platelet-rich Plasma](#)

Gabriela Martin, Domenico Ricucci, Jennifer L. Gibbs, Louis M. Lin

Unicystic Ameloblastoma Mimicking Apical Periodontitis: A Case Series

Rogério Oliveira Gondak, André Caroli Rocha, José Guilherme Neves Campos, Pablo Agustin Vargas, Oslei Paes de Almeida, Marcio Ajudarte Lopes, Alan Roger Santos-Silva