



## CONSORT Randomized Clinical Trial

[A Prospective Randomized Trial of Different Supplementary Local Anesthetic Techniques after Failure of Inferior Alveolar Nerve Block in Patients with Irreversible Pulpitis in Mandibular Teeth](#)

Mohammad D. Kanaa, John M. Whitworth, John Gerard Meechan

## Review Article

[Antagonistic Interactions between Sodium Hypochlorite, Chlorhexidine, EDTA, and Citric Acid](#)

Giampiero Rossi-Fedele, Esma J. Dođramaci, Andrea R. Guastalli, Liviu Steier, Jose Antonio Poli de Figueiredo

## Clinical Research

[10-year Survival Evaluation for Glass-fiber–supported Postendodontic Restoration: A Prospective Observational Clinical Study](#)

Michael Naumann, Manja Koelplin, Florian Beuer, Hendrik Meyer-Lueckel

[Comparative Analysis of Accessory Mesial Canal Identification in Mandibular First Molars by Using Four Different Diagnostic Methods](#)

Kênia Maria Pereira Soares de Toubes, Maria Ilma de Souza Côrtes, Maria Alice de Abreu Valadares, Luciana Cardoso Fonseca, Eduardo Nunes, Frank Ferreira Silveira

[Success Rates for Removing or Bypassing Fractured Instruments: A Prospective Clinical Study](#)

Giselle Nevares, Rodrigo Sanches Cunha, Mário Luis Zuolo, Carlos Eduardo da Silveira Bueno

[In Vivo Efficacy of Three Different Endodontic Irrigation Systems for Irrigant Delivery to Working Length of Mesial Canals of Mandibular Molars](#)

Hugo Roberto Munoz, Karla Camacho-Cuadra

## Basic Research: Biology

[Apical Periodontium Response to Enamel Matrix Derivative as an Intracanal Medication in Rat Immature Teeth with Pulp Necrosis: Radiographic and Histologic Findings](#)

Roberta Kochenborger Scarparo, Lenara Dondoni, Daiana Elisabeth Böttcher, Fabiana Soares Grecca, Jose A.P. Figueiredo, Eraldo L. Batista

[Coculture of Dental Pulp Stem Cells with Endothelial Cells Enhances Osteo-/Odontogenic and Angiogenic Potential \*In Vitro\*](#)

Waruna Lakmal Dissanayaka, Xuan Zhan, Chengfei Zhang, Kenneth M. Hargreaves, Lijian Jin, Edith H.Y. Tong

[Lipopolysaccharide Enhances Decorin Expression through the Toll-like Receptor 4, Myeloid Differentiating Factor 88, Nuclear Factor-Kappa B, and Mitogen-activated Protein Kinase Pathways in Odontoblast Cells](#)

Wenxi He, Tiejun Qu, Qing Yu, Zhihua Wang, Hanguo Wang, Jing Zhang, Anthony J. Smith

[Vesicular Glutamate Transporters in Axons That Innervate the Human Dental Pulp](#)

Sang Kyoo Paik, Sung Kuk Kim, Su Jung Choi, Eun Sun Yang, Sun Ho Ahn, Yong Chul Bae

[High-purity Hepatic Lineage Differentiated from Dental Pulp Stem Cells in Serum-free Medium](#)

Nikolay Ishkitiev, Ken Yaegaki, Toshio Imai, Tomoko Tanaka, Taka Nakahara, Hiroshi Ishikawa, Vanyo Mitev, Markus Haapasalo

[T-Lymphocyte and Cytokine Expression in Human Inflammatory Periapical Lesions](#)

Luciana Carla Neves de Brito, Flávia Rocha Fonseca Teles, Ricardo Palmier Teles, Antônio Helvécio Totola, Leda Quêrcia Vieira, Antônio Paulino Ribeiro Sobrinho

## Technology

[A Comparison of the Cytotoxicity and Proinflammatory Cytokine Production of EndoSequence Root Repair Material and ProRoot Mineral Trioxide Aggregate in Human Osteoblast Cell Culture Using Reverse-Transcriptase Polymerase Chain Reaction](#)

Maria Ciasca, Anita Aminoshariae, Ge Jin, Thomas Montagnese, Andre Mickel

[In Vitro Evaluation of MTAD and Nisin in Combination against Common Pathogens Associated with Root Canal Infection](#)

Zhongchun Tong, Lin Zhou, Rong Kuang, Haipeng Lv, Tiejun Qu, Longxing Ni

[Cytotoxicity and Genotoxicity of Root Canal Sealers Based on Mineral Trioxide Aggregate](#)

Claudia V. Bin, Marcia C. Valera, Samira E.A. Camargo, Sylvania B. Rabelo, Gleyce O. Silva, Ivan Balducci, Carlos Henrique R. Camargo

[Effects of Various Mixing Techniques on Push-out Bond Strengths of White Mineral Trioxide](#)

[Aggregate](#) Shahriar Shahi, Saeed Rahimi, Hamid Reza Yavari, Mohammad Samiei, Maryam Janani, Mahmoud Bahari, Majid Abdolrahimi, Farzaneh Pakdel, Amirala Aghbali

[Canal Shaping with WaveOne Primary Reciprocating Files and ProTaper System: A Comparative Study](#)

Elio Berutti, Giorgio Chiandussi, Davide Salvatore Paolino, Nicola Scotti, Giuseppe Cantatore, Arnaldo Castellucci, Damiano Pasqualini

[Evaluation of Push-out Bond Strength of Two Endodontic Post Systems](#)

Konstantinos Mastoras, Leonidas Vasiliadis, Elizabeth Koulaouzidou, Christos Gogos

[An In Vitro Cyclic Fatigue Analysis of Different Endodontic Nickel-Titanium Rotary Instruments](#)

Nilav Bhagabati, Seema Yadav, Sangeeta Talwar

[Are Endodontically Treated Incisors Reliable Abutments for Zirconia-based Fixed Partial Dentures in the Esthetic Zone?](#)

René Tunjan, Martin Rosentritt, Guido Sterzenbach, Arndt Happe, Roland Frankenberger, Rainer Seemann, Michael Naumann

[Treatment of Root Canal Biofilms of \*Enterococcus faecalis\* with Ozone Gas and Passive Ultrasound Activation](#)

Peter D. Case, Philip S. Bird, William A. Kahler, Roy George, Laurence J. Walsh

[Effect from Cyclic Fatigue of Nickel-Titanium Rotary Files on Torsional Resistance](#)

Ju-Yeong Kim, Gary Shun-Pan Cheung, Se-Hee Park, Dae-Cheol Ko, Jin-Wook Kim, Hyeon-Cheol Kim

[Effect of Laser-activated Irrigation of 1320-Nanometer Nd:YAG Laser on Sealer Penetration in Curved Root Canals](#)

Young-Mi Moon, Hyeon-Cheol Kim, Kwang-Shik Bae, Seung-Ho Baek, Won-Jun Shon, WooCheol Lee

[Failure of Setting of Mineral Trioxide Aggregate in the Presence of Fetal Bovine Serum and Its Prevention](#)

Yuran Kim, Sinyoung Kim, Yoo Seok Shin, Il-Young Jung, Seung Jong Lee

[Cyclic Fatigue and Torsional Resistance of Two New Nickel-Titanium Instruments Used in](#)

[Reciprocation Motion: Reciproc Versus WaveOne](#) Hyeon-Cheol Kim, Sang-Won Kwak, Gary Shun-Pan Cheung, Dae-Hoon Ko, Se-Min Chung, WooCheol Lee

[Evaluation of Antibacterial Effects by Atmospheric Pressure Nonequilibrium Plasmas against](#)

[\*Enterococcus faecalis\* Biofilms In Vitro](#) Tianfeng Du, Jingzhi Ma, Ping Yang, Zilan Xiong, Xinpei Lu, Yingguang Cao

## Case Report/Clinical Techniques

[Surgical Management of Vertical Root Fractures for Posterior Teeth: Report of Four Cases](#) Spyros G. Floratos, Samuel I. Kratchman