



## CONSORT Randomized Clinical Trial

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[Effect of Operator and Subject Gender on Injection Pain: A Randomized Double-blind Study](#)  
Shayne Perry, Melissa Drum, Al Reader, John Nusstein, Mike Beck

## Review Article

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[Regenerative Endodontic Therapy: A Data Analysis of Clinical Protocols](#)  
Evangelos G. Kontakiotis, Christos G. Filippatos, Giorgos N. Tzanetakis, Anastasia Agrafioti

## Clinical Research

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[The Effect of Canal Preparation on Fill Length in Straight Root Canals Obturated with GuttaCore](#)

Robert B. Whitten, Marc E. Levitan

[Comparison of Fracture Sites and Post Lengths in Longitudinal Root Fractures](#)

Tsutomu Sugaya, Megumi Nakatsuka, Kana Inoue, Saori Tanaka, Hirofumi Miyaji, Ryuji Sakagami, Masamitsu Kawamami

[Prevalence of Middle Mesial Canals in Mandibular Molars after Guided Troughing under High Magnification: An \*In Vivo\* Investigation](#)

Adham A. Azim, Allan S. Deutsch, Charles S. Solomon

[Clinical Influence of Different Intracanal Medications on Th1-type and Th2-type Cytokine Responses in Apical Periodontitis](#)

Frederico C. Martinho, Gustavo G. Nascimento, Fabio R.M. Leite, Ana P.M. Gomes, Lilian F. Freitas, Izabel C.G. Camões  
[Long-term Survival of Endodontically Treated Teeth at a Public Dental Specialist Clinic](#)

Daniela Landys Borén, Peter Jonasson, Thomas Kvist

[Assessment of Patients' Awareness and Factors Influencing Patients' Demands for Sedation in Endodontics](#)

Yoo Kyoom Huh, Thomas A. Montagnese, Jarrod Harding, Anita Aminoshariae, Andre Mickel

[Periapical and Endodontic Status Scale Based on Periapical Bone Lesions and Endodontic Treatment Quality Evaluation Using Cone-beam Computed Tomography](#)

Tadas Venskutonis, Gianluca Plotino, Luigi Tocci, Gianluca Gambarini, Julius Maminskas, Gintaras Juodzbalys

[Analysis of Multiple Cytokine Polymorphisms in Individuals with Untreated Deep Carious Lesions Reveals \*IL1B\* \(rs1143643\) as a Susceptibility Factor for Periapical Lesion Development](#)

Alisa Dill, Ariadne Letra, Letícia Chaves de Souza, Mamatha Yadlapati, Claudia Cristina Biguetti, Gustavo Pompermaier Garlet, Alexandre R. Vieira, Renato Menezes Silva

[Comparative Evaluation of Accuracy of 2 Electronic Apex Locators with Conventional Radiography: An \*Ex vivo\* Study](#)  
Deepika Khandewal, Nidambur Vasudev Ballal, Muliya Vidya Saraswathi

## Basic Research

### Biology

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[Enriched Trimethylation of Lysine 4 of Histone H3 of WDR63 Enhanced Osteogenic Differentiation Potentials of Stem Cells from Apical Papilla](#)

Shu Diao, Dong-Mei Yang, Rui Dong, Li-Ping Wang, Jin-Song Wang, Juan Du, Song-Lin Wang, Zhipeng Fan

[FOXP3 DNA Methylation Levels as a Potential Biomarker in the Development of Periapical Lesions](#)

Kelma Campos, Carolina F. Franscisconi, Valerie Okehie, Letícia C. de Souza, Ana Paula F. Trombone, Ariadne Letra, Gustavo P. Garlet, Ricardo S. Gomez, Renato M. Silva

### Technology

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[Removal of Filling Materials from Oval-shaped Canals Using Laser Irradiation: A Micro-computed Tomographic Study](#)

Ali Keleş, Hakan Arslan, Aliye Kamalak, Merve Akçay, Manoel D. Sousa-Neto, Marco Aurélio Versiani

**Radiopacifier Particle Size Impacts the Physical Properties of Tricalcium Silicate-based Cements**

Mohammad Ali Saghirī, James L. Gutmann, Jafar Orangi, Armen Asatourian, Nader Sheibani

**Micro-computed Tomographic Analysis of the Root Canal Morphology of the Distal Root of Mandibular First Molar**

Carolina Filpo-Perez, Clovis Monteiro Bramante, Marcelo Haas Villas-Boas, Marco Antonio Húngaro Duarte, Marco Aurélio Versiani, Ronald Ordinola-Zapata

**Apical Extrusion of Debris in Flat-oval Root Canals after Using Different Instrumentation Systems**

Alison Luís Kirchhoff, Luiz Fernando Fariniuk, Isabel Mello

**Phytic Acid: An Alternative Root Canal Chelating Agent**

Mohannad Nassar, Noriko Hiraishi, Yukihiko Tamura, Masayuki Otsuki, Kazuhiro Aoki, Junji Tagami

**Comparison of Quick-Set and Mineral Trioxide Aggregate Root-end Fillings for the Regeneration of Apical Tissues in Dogs**

George D. Kohout, Jianing He, Carolyn M. Primus, Lynne A. Opperman, Karl F. Woodmansey

**Effect of the Size of the Apical Enlargement with Rotary Instruments, Single-cone Filling, Post Space Preparation with Drills, Fiber Post Removal, and Root Canal Filling Removal on Apical Crack Initiation and Propagation**

Ismail Davut Çapar, Banu Uysal, Evren Ok, Hakan Arslan

**Effect of QMix 2in1 on Sealer Penetration into the Dentinal Tubules**

Aysun Kara Tuncer

**Dentin Crack Formation during Root Canal Preparations by the Twisted File Adaptive, ProTaper Next, ProTaper Universal, and WaveOne Instruments**

Ertuğrul Karataş, Hicran Ateş Gündüz, Damla Özsu Kırıcı, Hakan Arslan, Meltem Çolak Topçu, Kübra Yeşildal Yeter

## Case Report/Clinical Techniques

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**Extraradicular Infection as the Cause of Persistent Symptoms: A Case Series**

Domenico Ricucci, José F. Siqueira, Weber S.P. Lopes, Adalberto R. Vieira, Isabela N. Rôças

**Perforating Internal Root Resorption Repaired with Mineral Trioxide Aggregate Caused Complete Resolution of Odontogenic Sinus Mucositis: A Case Report**

Maja Bendyk-Szeffer, Ryta Łagocka, Małgorzata Trusewicz, Mariusz Lipski, Jadwiga Buczkowska-Radlińska