



## Review Article

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### [Tooth Retention through Endodontic Microsurgery or Tooth Replacement Using Single Implants: A Systematic Review of Treatment Outcomes](#)

Mahmoud Torabinejad, Maria Landaez, Marites Milan, Chun Xiao Sun, Jeffrey Henkin, Aladdin Al-Ardah, Mathew Kattadiyil, Khaled Bahjri, Salem Dehom, Elisa Cortez, Shane N. White

## CONSORT Randomized Clinical Trial

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### [A Randomized Controlled Study of the Use of ProRoot Mineral Trioxide Aggregate and Endocem as Direct Pulp Capping Materials](#)

Minju Song, Minji Kang, Hyeon-Cheol Kim, Euseong Kim

### [Evaluation of the Gow-Gates and Vazirani-Akinosi Techniques in Patients with Symptomatic Irreversible Pulpitis: A Prospective Randomized Study](#)

Vivian Click, Melissa Drum, Al Reader, John Nusstein, Mike Beck

## Clinical Research

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### [Periapical Microsurgery: The Effect of Root Dentinal Defects on Short- and Long-term Outcome](#)

Peter Z. Tawil, Veeral M. Saraiya, Johnah C. Galicia, Derek J. Duggan

### [Middle Mesial Canals in Mandibular Molars: Incidence and Related Factors](#)

Ali Nosrat, Raney J. Deschenes, Patricia A. Tordik, M. Lamar Hicks, Ashraf F. Fouad

### [Effect of Sodium Bicarbonate-buffered Lidocaine on the Success of Inferior Alveolar Nerve Block for Teeth with Symptomatic Irreversible Pulpitis: A Prospective, Randomized Double-blind Study](#)

Masoud Saatchi, Abbasali Khademi, Badri Baghaei, Hamid Noormohammadi

### [Efficacy of Platelet-rich Plasma as a Scaffold in Regenerative Endodontic Treatment](#)

Tugba Bezgin, Ayca Dilara Yilmaz, Burcu Nihan Celik, Mehmet Eray Kolsuz, Hayriye Sonmez

## Basic Research

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## Biology

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### [Effects of Alendronate on Osteoclast Formation and Activity \*In Vitro\*](#)

Caroline A. Martins, Gabriele Leyhausen, Joachim Volk, Werner Geurtsen

### [Mechanical Changes in Human Dental Pulp Stem Cells during Early Odontogenic Differentiation](#)

Taneka D. Jones, Hamed Naimipour, Shan Sun, Michael Cho, Satish B. Alapati

### [In Vitro Cytotoxicity of Calcium Silicate-containing Endodontic Sealers](#)

Hui-min Zhou, Tian-feng Du, Ya Shen, Zhe-jun Wang, Yu-feng Zheng, Markus Haapasalo

### [Evaluation of Bone Tissue Response to a Sealer Containing Mineral Trioxide Aggregate](#)

Eloisa Assmann, Daiana Elisabeth Böttcher, Carolina Bender Hoppe, Fabiana Soares Grecca, Patrícia Maria Poli Kopper

## Technology

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### [Behavior of Nickel-Titanium Instruments Manufactured with Different Thermal Treatments](#)

Érika Sales Joviano Pereira, Ana Cecília Diniz Viana, Vicente Tadeu Lopes Buono, Ove A. Peters, Maria Guiomar de Azevedo Bahia

### [Sealers and Warm Gutta-percha Obturation Techniques](#)

Josette Camilleri

### [Thermoplastic Properties of Endodontic Gutta-percha: A Thermographic \*In Vitro\* Study](#)

Benjamín Briseño Marroquín, Thomas Gerhard Wolf, Dennis Schürger, Brita Willershausen

### [Comparison of Different Dentin Pretreatment Protocols on the Bond Strength of Glass Fiber Post Using Self-etching Adhesive](#)

Frederico C. Martinho, Claudio Antonio Talge Carvalho, Luciane D. Oliveira, Ana Júlia Farias de Lacerda, Ana Cláudia Carvalho Xavier, Marina Gullo Augusto, Rayssa Ferreira Zanatta, Cesar Rogerio Pucci

[Effect of Additives on Mineral Trioxide Aggregate Setting Reaction Product Formation](#)

Angela M. Zapf, Sharath C.V. Chedella, David W. Berzins

[Effect of EDTA Preparations on Rotary Root Canal Instrumentation](#)

Evan R. Whitbeck, Kelli Swenson, Patricia A. Tordik, Shayne A. Kondor, Terry D. Webb, Jirun Sun

[Efficacy of 3 Different Irrigation Systems on Removal of Calcium Hydroxide from the Root Canal: A Scanning Electron Microscopic Study](#)

Sami Alturaiki, Hebah Lamphon, Hadeel Edrees, Michael Ahlquist

[Fitness of Gutta-percha Cones in Curved Root Canals Prepared with Reciprocating Files Correlated with Tug-back Sensation](#)

Heeyoung Yoon, Seung-Ho Baek, Kee-Yeon Kum, Hyeon-Cheol Kim, Young-Mi Moon, Denny Y. Fang, WooCheol Lee

[Application of Resin Adhesive on the Surface of a Silanized Glass Fiber-reinforced Post and Its Effect on the Retention to Root Dentin](#)

Fernanda Weingartner Machado, Mayara Bossardi, Tatiana dos Santos Ramos, Lisia Lorea Valente, Eliseu Aldrighi Münchow, Evandro Piva

[In Situ Assessment of the Setting of Tricalcium Silicate-based Sealers Using a Dentin Pressure Model](#)

Maria Xuereb, Paul Vella, Denis Damidot, Charles V. Sammut, Josette Camilleri

## Case Report/Clinical Techniques

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[Implications of Endodontic-related Sinus Aspergillosis in a Patient Treated by Infliximab: A Case Report](#)

Maud Guivarc'h, Ugo Ordioni, Jean-Hugues Catherine, Fabrice Campana, Jean Camps, Frédéric Bukiet

[A Novel Treatment for Propagated Crown Fractures](#)

Philip L. Michaelson