

## Review Article

### [Efficacy of Corticosteroids on Postoperative Endodontic Pain: A Systematic Review and Meta-analysis](#)

Sayna Shamszadeh, Armin Shirvani, Mohammad Jafar Eghbal, Saeed Asgary

### [Application of Enamel Matrix Derivative \(Emdogain\) in Endodontic Therapy: A Comprehensive Literature Review](#)

Howard H. Wang, Nima D. Sarmast, Elham Shadmehr, Nikola Angelov, Shahrokh Shabahang, Mahmoud Torabinejad

### [Deciphering Endodontic Microbial Communities by Next-generation Sequencing](#)

Jae M. Shin, Ting Luo, Kyu Han Lee, Diogo Guerreiro, Tatiana M. Botero, Neville J. McDonald, Alexander H. Rickard

## Clinical Research

### [Impact of Case Difficulty on Endodontic Mishaps in an Undergraduate Student Clinic](#)

Sivakami Rethnam Haug, Ane F. Solfjeld, Line E. Ranheim, Asgeir Bårdsen

### [Differences on the Root and Root Canal Morphologies between Asian and White Ethnic Groups Analyzed by Cone-beam Computed Tomography](#)

Jorge N.R. Martins, Yongchun Gu, Duarte Marques, Helena Francisco, João Caramês

### [Comparative Expression of CD34, Intercellular Adhesion Molecule-1, and Podoplanin and the Presence of Mast Cells in Periapical Granulomas, Cysts, and Residual Cysts](#)

Cristiane Barbosa Lopes, Luciana Armada, Fábio Ramôa Pires

## Regenerative Endodontics

### [Antibacterial Efficacy and Discoloration Potential of Endodontic Topical Antibiotics](#)

Turky ALSaeed, Ali Nosrat, Mary Anne Melo, Ping Wang, Elaine Romberg, Huakun Xu, Ashraf F. Fouad

### [The Relationship of Surface Characteristics and Antimicrobial Performance of Pulp Capping Materials](#)

Cher Farrugia, Christie Y.K. Lung, Pierre Schembri Wismayer, Maria Teresa Arias-Moliz, Josette Camilleri

### [Poly\(Adenosine Phosphate Ribose\) Polymerase 1 Inhibition Enhances Brain-derived Neurotrophic Factor Secretion in Dental Pulp Stem Cell-derived Odontoblastlike Cells](#)

Yessenia Valverde, Raghuvaran Narayanan, Satish B. Alapati, Fanny Chmilewsky, Chun-Chieh Huang, Sriram Ravindran, Seung H. Chung

### [Characterization of the Cellular Responses of Dental Mesenchymal Stem Cells to the Immune System](#)

Dean Whiting, Whasun Oh Chung, James D. Johnson, Avina Paranjpe

## Basic Research

## Biology

### [Culture-independent Characterization of the Microbiome of Healthy Pulp](#)

Christopher Widmer, Jorie Skutas, Cole Easson, Jose V. Lopez, Calvin Torneck, Michael Flax, Taner Cem Sayin

## Technology

### [Cell Viability and Tissue Reaction of NeoMTA Plus: An \*In Vitro\* and \*In Vivo\* Study](#)

Lucas Siqueira Pinheiro, Júlia Eick Iglesias, Daiana Bojink, Letícia Boldrin Mestieri, Patrícia Maria Poli Kopper, José Antônio de Poli Figueiredo, Fabiana Soares Grecca

### [Micro-computed Tomography Shaping Ability Assessment of the New Blue Thermal Treated Reciproc Instrument](#)

Felipe Gonçalves Belladonna, Marco Simões Carvalho, Daniele Moreira Cavalcante, Jaqueline Tavares Fernandes, Ana Carolina de Carvalho Maciel, Henrique Eduardo Oliveira, Ricardo Tadeu Lopes, Emmanuel João Nogueira Leal Silva, Gustavo De-Deus

### [Accuracy of Digital Periapical Radiography and Cone-beam Computed Tomography for Diagnosis of Natural and Simulated External Root Resorption](#)

Ângela Graciela Deliga Schröder, Fernando Henrique Westphalen, Julio Cesar Schröder, Ângela Fernandes, Vânia Portela Ditzel Westphalen

[Vertical Root Fracture in Buccal Roots of Bifurcated Maxillary Premolars from Condensation of Gutta-percha](#)

Herzl Chai, Aviad Tamse

[Cyclic Fatigue Resistance of XP-Endo Shaper, K3XF, and ProTaper Gold Nickel-titanium Instruments](#)

Cangül Keskin, Uğur Inan, Duygu H. Guler, Elif Kalyoncuoğlu

[Influence of Tooth Orientation on the Detection of Vertical Root Fracture in Cone-beam Computed Tomography](#)

Victor Aquino Wanderley, Deborah Queiroz Freitas, Francisco Haiter-Neto, Matheus Lima Oliveira

[Bacteria and Hard Tissue Debris Extrusion and Intracanal Bacterial Reduction Promoted by XP-endo Shaper and Reciproc Instruments](#)

Flávio R.F. Alves, Pâmella L. Paiva, Marília F. Marceliano-Alves, Laura J. Cabreira, Kenio C. Lima, José F. Siqueira Jr., Isabela N. Rôças, José C. Provenzano

[Effect of Intracoronal Depth of Teeth Restored with Endocrowns on Fracture Resistance: \*In Vitro\* and 3-dimensional Finite Element Analysis](#)

Nereu Roque Dartora, Michele Bertoluzi de Conto Ferreira, Izabela Cristina Maurício Moris, Elisabeth Helena Brazão, Aloísio Oro Spazin, Manoel Damiano Sousa-Neto, Yara Terezinha Silva-Sousa, Erica Alves Gomes

[Effect of Root Dentin Conditioning on the Pushout Bond Strength of Biodentine](#)

Liz Paulson, Nidambur Vasudev Ballal, Abhishek Bhagat

[Effects of Different Glide Path Files on Apical Debris Extrusion in Curved Root Canals](#)

Betul Gunes, Kubra Yesildal Yeter

## Case Report/Clinical Techniques

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[Guided Endodontic Access of Calcified Anterior Teeth](#)

Warley Luciano Fonseca Tavares, Ana Cecília Diniz Viana, Vinícius de Carvalho Machado, Luiz Carlos Feitosa Henriques, Antônio Paulino Ribeiro Sobrinho

[Erratum](#)