Editorial

Insights Into the March 2021 Issue of the JOE

Review Article

New International Classification of Orofacial Pain: What Is in It For Endodontists?
Maria Pigg, Donald R. Nixdorf, Alan S. Law, Tara Renton, Yair Sharav, Lene Baad-Hansen, Thomas List

Open Access

Postoperative Pain: An Analysis on Evolution of Research in Half-Century
Ali Nosrat, Omid Dianat, Prashant Verma, Donald R. Nixdorf, Alan S. Law

Clinical Research

Denosumab Use as a Predictor Variable for External Cervical Resorption: A Case-Control Study
Lolwa Alyahya, Garry L. Myers

Combination of Nonsurgical Endodontic and Vital Pulp Therapy for Management of Mature Permanent Mandibular Molar Teeth with Symptomatic Irreversible Pulpitis and Apical Periodontitis
Bhawna Koli, Amrita Chawla, Ajay Logani, Vijay Kumar, Sidhartha Sharma

Four-year Outcome of Nonsurgical Root Canal Retreatment Using Cone-beam Computed Tomography: A Prospective Cohort Study
Ming-Ming Zhang, Gao-Feng Fang, Xiao-Tong Chen, Yu-Hong Liang

Vertucci’s Root Canal Configuration of 14,413 Mandibular Anterior Teeth in a Brazilian Population: A Prevalence Study Using Cone-beam Computed Tomography
Natália Barcellos de Freitas Cotinha, Fernanda Carneiro Nunes, João Batista Gagnó Intra, Armelindo Roldi, Adriana de Jesus-Soares, Marcelo Santos Coelho, Marcos Frozioni
Tomography
George T.M. Candeiro, Ingrid Mendonça Monteiro Ddot Teixeira, Dhianel Anderson Olimpio Barbosa, Nilton Vivaacqua-Gomes, Flávio R.F. Alves
Severe Pain after Endodontic Surgery: An Analysis of Incidence and Risk Factors
Cory J. Malagise, Navid Khalkhinejad, Yogesh T. Patel, Poorya Jalali, Jianing He
Characterization of Root Canal Microbiota in Teeth Diagnosed with Irreversible Pulpitis
Shatha Zahrán, Elizabeth Witherden, Francesco Mannocci, Garrit Kolier

Regenerative Endodontics
Melatonin Treatment Alters Biological and Immunomodulatory Properties of Human Dental Pulp Mesenchymal Stem Cells via Augmented Transforming Growth Factor Beta Secretion
David García-Bernal, Sergio López-García, José L. Sanz, Julia Guerrero-Gironés, Esther M. García-Navarro, Jose M. Moralde, Leopoldo Forner, Francisco J. Rodríguez-Lozano

Basic Research

Biology
Potential Roles of Bone Morphogenetic Protein 9 in the Odontogenic Differentiation of Dental Pulp Cells
Xiangfen Li, Liu Wang, Qin Su, Ling Ye, Xuedong Zhou, Lan Zhang, Dongzhe Song, Dingming Huang
Evaluation of Cannabinoids on the Odonto/Osteogenesis in Human Dental Pulp Cells In Vitro
Xia Qi, Chunyan Liu, Guohua Li, Dalla Al-Alfe, Susan Paurazas, Mazin Askar, Dongru Yang, Zheng Zhou
An In Vitro Model to Study the Colonization and Tubular Invasion of Enterococcus faecalis
Chin-Lo Hahn, Kathryn Hanford
EDTA Promotes the Mineralization of Dental Pulp In Vitro and In Vivo
Linyi Liu, Sha Leng, Linqiao Tang, Qian Lu, Weizhe Xu, Xuelian Tan, Dingming Huang, Lan Zhang

Technology
Recovery of Oral In Vitro Biofilms after Exposure to Peptides and Chlorhexidine
Tian Zhang, Lingyun Xia, Zhejun Wang, Robert E.W. Hancock, Markus Haapasalo
Effect of Flexural Stress on Torsional Resistance of NiTi Instruments
Marco Seracchiani, Gabriele Miccoli, Dario Di Nardo, Alessio Zanza, Marco Cantore, Gianluca Gambarini, Luca Testarelli
Micro–computed Evaluation of Canal Transportation and Centering Ability of 5 Rotary and Reciprocating Systems with Different Metallurgical Properties and Surface Treatments in Curved Root Canals
Emina Kabil, Marko Katić, Ivica Anić, Ivona Bago
Spencer Holmes, Ryan Gibson, Jacob Butler, Rafael Pacheco, Mazin Askar, Susan Paurazas
Effects of Root Maturation and Thickness Variation in Coronal Mineral Trioxide Aggregate Plugs Under Traumatic Load on Stress Distribution in Regenerative Endodontic Procedures: A 3-dimensional Finite Element Analysis Study
Akif Demirel, Tuğba Bezgin, Şaziye Sari
Evaluating the Effect of Oblique Ridge Conservation on Stress Distribution in an Endodontically Treated Maxillary First Molar: A Finite Element Study
Mahdi Baniasadi, Hossein Darijani, Masoud Parirokh, Faeze Hamze

Case Report/Clinical Techniques
Preserving the Neurovascular Bundle in Targeted Endodontic Microsurgery: A Case Series
Gary Benjamin, Amber Ather, Mike R. Bueno, Carlos Estrela, Anibal Diogenes

A Contemporary Treatment of an Iatrogenic Root Perforation: A Case Report
Mark D. Evans

Use of 3-dimensional–Printed Guide in Hemisection and Autotransplantation of a Fusion Tooth: A Case Report
Manuel Sato, Alvaro Garcia-Sanchez, Sergio Sanchez, I-Ping Chen

Society News

Associate Registry
Donor Honor Roll

Frontmatter

Editorial Board
Table of Contents
Guidelines for Authors
QR Codes