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Review Articles

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Clinical endodontic management during the COVID-19 pandemic: a literature review and clinical recommendations

A. A. Azim, J. Shabbir, Z. Khurshid, M. S. Zafar, H. M. Ghabbani, P. M. H. Dummer

Pages: 1461-1471 | First Published: 11 September 2020

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Diabetes mellitus and the healing of periapical lesions in root filled teeth: a systematic review and meta-analysis

A. Gupta, V. Aggarwal, N. Mehta, D. Abraham, A. Singh

Pages: 1472-1484 | First Published: 12 July 2020

Basic Research – Biological

Sugarcane cystatin CaneCPI-1 promotes osteogenic differentiation in human dental pulp cells: a new insight into cysteine proteases inhibitors

E. M. Rodrigues, K. S. Viola, A. L. Gomes-Cornélio, A. Soares-Costa, F. Henrique-Silva, C. Rossa-Junior, J. M. Guerreiro-Tanomaru, M. Tanomaru-Filho

Pages: 1485-1493 | First Published: 30 July 2020

Biocompatibility, induction of mineralization and antimicrobial activity of experimental intracanal pastes based on glass and glass-ceramic materials

J. M. de Araújo Lopes, F. Benetti, G. C. Rezende, M. T. Souza, L. C. Conti, E. Ervolino, R. C. Jacinto, E. D. Zanotto, L. T. A. Cintra

Pages: 1494-1505 | First Published: 07 August 2020

Do pre-existing microcracks play a role in the fracture resistance of roots in a laboratory setting?

D. M. Cavalcante, F. G. Belladonna, M. Simões-Carvalho, J. C. A. Carvalhal, E. M. Souza, R. T. Lopes, E. J. N. L. Silva, P. M. H. Dummer, G. De-Deus

Pages: 1506-1515 | First Published: 11 August 2020

A laboratory study of the impact of ultraconservative access cavities and minimal root canal tapers on the ability to shape canals in extracted mandibular molars and their fracture resistance

C. M. Augusto, A. F. A. Barbosa, C. C. Guimarães, C. O. Lima, C. M. Ferreira, L. M. Sassone, E. J. N. L. Silva

Pages: 1516-1529 | First Published: 19 July 2020

Influence of minimally invasive endodontic access cavities on root canal shaping and filling ability, pulp chamber cleaning and fracture resistance of extracted human mandibular incisors

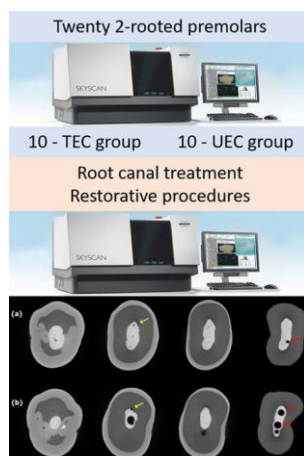
G. Rover, C. O. de Lima, F. G. Belladonna, L. F. R. Garcia, E. A. Bortoluzzi, E. J. N. L. Silva, C. S. Teixeira

Pages: 1530-1539 | First Published: 05 August 2020

Effect of access cavity design on gaps and void formation in resin composite restorations following root canal treatment on extracted teeth

E. J. N. L. Silva, V. B. Oliveira, A. A. Silva, F. G. Belladonna, M. Prado, H. S. Antunes, G. De-Deus

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Two-rooted maxillary premolars were scanned in a micro-CT and allocated in two groups according to the design access of the tooth: TEC or UEC. Root canal treatment and restorative procedures were performed and a new micro-CT evaluated the quality of the coronal restoration (gaps and voids). More voids were observed in the UEC group when compared to the TEC. Gap formation did not differ between groups.

Nanohardness reduction and root dentine erosion after final irrigation with ethylenediaminetetraacetic, etidronic and peracetic acids

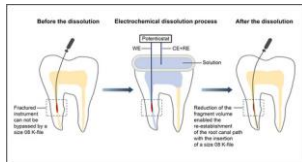
Ö. İ. Ulusoy, A. Ş. Mantı, B. Çelik

Pages: 1549-1558 | First Published: 31 July 2020

Electrochemical dissolution of nickel-titanium instrument fragments in root canals of extracted human maxillary molars using a small reservoir of electrolyte

C. C. F. Amaral, F. Ormiga, O. M. O. Araújo, R. T. Lopes, J. A. C. P. Gomes

Pages: 1559-1568 | First Published: 07 August 2020



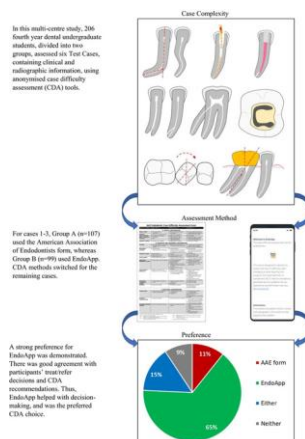
The electrochemical dissolution using two electrodes immersed in the solution contained in the acrylic microcell, allowed the recovery of the original canal path with a size 08 K-file. (WE) working electrode in contact with the fragment; (CE + RE) counter-electrode and reference electrode.

Education

Comparison of two case difficulty assessment methods on cohorts of undergraduate dental students – a multi-centre study

P. K. Shah, H. F. Duncan, D. Abdullah, P. L. Tomson, G. Murray, T. M. Friend, S. Thomas, S. Butcher, B. S. Chong

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In this multi-centre study, 206 fourth year dental undergraduate students, divided into two groups, assessed six Test Cases, containing clinical and radiographic information, using anonymised case difficulty assessment (CDA) tools. For cases 1–3, Group A ($n = 107$) used the American Association of Endodontists form, whereas Group B ($n = 99$) used EndoApp. CDA methods switched for the remaining cases. A strong preference for EndoApp was demonstrated. There was good agreement with participants' treat/refer decisions and CDA recommendations. Thus, EndoApp helped with decision-making, and was the preferred CDA choice.

Open Access

Virtual reality: an effective tool for teaching root canal anatomy to undergraduate dental students – a preliminary study

M. Reymus, A. Liebermann, C. Diegritz

Pages: 1581-1587 | First Published: 04 August 2020

Clinical Techniques and case reports

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Protective device to reduce aerosol dispersion in dental clinics during the COVID-19 pandemic

R. Teichert-Filho, C. N. Baldasso, M. M. Campos, M. S. Gomes
Pages: 1588-1597 | First Published: 31 July 2020

Letter to the Editor

 [Free Access](#)

Continuing endodontic education and COVID-19: before, during and after?

A. Galibourg, O. A. Peters, F. Diemer, K. Nasr, D. Maret
Pages: 1598-1599 | First Published: 13 July 2020