

Endodontics

[View the current Endodontics InDepth page on BioPortfolio.com](#) (PDF)

(<http://www.bioportfolio.com/indepth/Endodontics.html>) - Regularly Updated.

Endodontics, from the Greek endo and odons , is a specialist sub-field of dentistry that deals with the tooth pulp and the tissues surrounding the root of a tooth. The pulp can become diseased or injured, and is often unable to repair itself; if it dies, endodontic treatment is required. Endodontists are dentists who have specialized in this field; qualification as an endodontist typically requires an additional 2-3 years of training following dental school. Many endodontic residents do original research and earn a Master's degree as well as a speciality certificate. They specialize and limit their practice to root canal therapy and root canal surgery, and use their special training and experience in treating difficult cases, such as teeth with narrow or blocked canals, or unusual anatomy. Endodontists may use advanced technology, such as operating microscopes, ultrasonics and digital imaging, to perform these special services, and often have great experience in successfully treating patients who present in pain. Patients requiring root canal therapy are either referred by their general dentists to the endodontist or are self referred; the most common procedure done in endodontics is root-canal therapy. Other procedures practiced in endodontics include incision for drainage, internal tooth bleaching to fix teeth that have blackened because of infiltration of decayed soft tissue into the dentin in the teeth - most often seen in incisors that have been injured through a sudden impact, and periradicular surgery ; the more radical treatments generally are needed in cases of abscesses, root fractures, and problematic tooth anatomy, but may be indicated in treating teeth that have persistent root end pathosis following root canal treatment. ([From the Wikipedia article Endodontics](#) .)

Recent Publications on Endodontics:



- [Influence of size and taper of artificial canals on the trajectory of NiTi rotary instruments in cyclic fatigue studies.](#)
OBJECTIVE: The aim of this study was to investigate the influence of the... 21st November, 2009
Department of Endodontics, University "La Sapienza, Rome, Italy"- Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2009 Nov 16. ([DOI Direct Link](#))
- [Factors associated with inter-municipality differences in dental caries experience among Danish adolescents. An ecological study.](#)
Ekstrand KR, Christiansen MEC, Qvist V, Ismail A. Factors associated with... 20th November, 2009
Department of Cariology and Endodontics, Dental Faculty of Copenhagen,- Community Dent Oral Epidemiol. 2009 Nov 18. ([DOI Direct Link](#))
- [The effects of short-term calcium hydroxide application on the strength of dentine.](#)
Abstract - Background: Studies have suggested that the long-term exposure... 19th November, 2009
Department of Endodontics, School of Dentistry, Shiraz University of- Dent Traumatol. 2009 Nov 17. ([DOI Direct Link](#))
- [The induction of cytotoxicity, oxidative stress, and genotoxicity by root canal sealers in mammalian cells.](#)

- OBJECTIVE: Toxicologic aspects of the root canal sealers Acroseal,...*17th November, 2009
 Department of Restorative Dentistry and Endodontics, Sao Paulo State- Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2009 Dec;108(6):952-60. ([DOI Direct Link](#))
- [Sealing efficiency of BeeFill 2in1 and System B/Obtura II versus single-cone and cold lateral compaction techniques.](#)
*OBJECTIVE: The objective of this study was to investigate the sealing...*17th November, 2009
 Department of Endodontics, Faculty of Dentistry, Hacettepe University,- Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2009 Dec;108(6):e51-5. ([DOI Direct Link](#))
 - [Evaluation of the radiopacity of some commercial and experimental root-end filling materials.](#)
*OBJECTIVE: The aim of the present study was to evaluate the radiopacity of...*17th November, 2009
 Department of Operative Dentistry, Dental Materials and Endodontics,- Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2009 Dec;108(6):e35-8. ([DOI Direct Link](#))
 - [Histochemical localization of neutral proteases released during development of rat periradicular lesion.](#)
*OBJECTIVE: The purpose of the present study was to examine the role of...*17th November, 2009
 Department of Endodontics, Aichi-Gakuin University School of Dentistry,- Arch Oral Biol. 2009 Nov 11. ([DOI Direct Link](#))
 - [Sonic extracts from a bacterium related to periapical disease activate gelatinase A and inactivate tissue inhibitor of metalloproteinases TIMP-1 and TIMP-2.](#)
*AIM: To examine the effects of sonicated bacterial extracts (SBEs) from...*17th November, 2009
 Department of Endodontics, School of Dentistry, Aichi-Gakuin University,- Int Endod J. 2009 Dec;42(12):1104-11. ([DOI Direct Link](#))
 - [Preliminary study of the presence and association of bacteria and archaea in teeth with apical periodontitis.](#)
*AIM: To investigate, by reverse transcription polymerase chain reaction...*17th November, 2009
 Department of Endodontics and Operative Dentistry, School of Stomatology,- Int Endod J. 2009 Dec;42(12):1096-103. ([DOI Direct Link](#))
 - [Distance from file tip to the major apical foramen in relation to the numeric meter reading on the display of three different electronic apex locators.](#)
*AIM: To establish and compare the relationship between the distance from...*17th November, 2009
 Pulp Biology and Endodontics, Department of Restorative Sciences, Graduate- Int Endod J. 2009 Dec;42(12):1065-70. ([DOI Direct Link](#))
 - [Evidence-based patient education: knowledge transfer to endodontic patients.](#)
*Evidence-based treatment is emphasized in oral health care, but there has...*17th November, 2009
 Department of Anesthesia, Stanford University, 450 Broadway St., Pavilion- J Dent Educ. 2009 Nov;73(11):1293-305.
 - [In vitro sealing ability of temporary restorative materials used in endodontics.](#)
*This study evaluated the marginal sealing ability of six temporary...*13th November, 2009
 - Gen Dent. 2009 Nov-Dec;57(6):622-5.
 - [Comparative study of the effect of ultrasound on the removal of intracanal posts.](#)
*This study sought to evaluate how ultrasound affected the removal of...*12th November, 2009
 Department of Endodontics, University of Ribeirao Preto, Ribeirao Preto,- Gen Dent. 2009 Sep-Oct;57(5):492-5.
 - [Survey of local anesthetic use by Ontario dentists.](#)
*OBJECTIVE: Local anesthetics are believed to be the most frequently used...*11th November, 2009
 Department of endodontics, Faculty of dentistry, University of Toronto,- J Can Dent Assoc. 2009 Nov;75(9):649.
 - [Volumetric analysis of root fillings using spiral computed tomography: an in vitro study.](#)
*Anbu R, Nandini S, Velmurugan N. Volumetric analysis of root fillings...*7th November, 2009
 Department of Conservative Dentistry & Endodontics, Meenakshi Ammal Dental- Int Endod J. 2009 Nov 4. ([DOI Direct Link](#))

BioNews Results for Endodontics

- [Effect of denture base-resin with prereacted glass-ionomer filler on dentin demineralization](#)
MDLinx: Nov 16 2009 12:54PM Matching: endodontics
- [Bacterial colonisation of root canal dentine previously treated with endodontic irrigants](#)
MDLinx: Nov 9 2009 12:07PM Matching: endodontics
- [Dentin strain induced by laser irradiation](#)
MDLinx: Nov 9 2009 12:07PM Matching: endodontics
- [Influence of the shape of artificial canals on the fatigue resistance of NiTi rotary instruments](#)
MDLinx: Nov 9 2009 12:07PM Matching: endodontics
- [Volumetric analysis of root fillings using spiral computed tomography: an in vitro study](#)
MDLinx: Nov 6 2009 11:25AM Matching: endodontics
- [Effect of adhesive system type and root region on the push-out bond strength of glassfibre posts to radicular dentine](#)
MDLinx: Nov 6 2009 11:24AM Matching: endodontics
- [Life Sciences: Research conducted at Sichuan University has updated our knowledge about life sciences](#)
NewsRX: Nov 4 2009 6:28AM Matching: endodontics
- [In vitro evaluation of effect of various endodontic solutions on selected physical properties of white mineral trioxide aggregate](#)
MDLinx: Oct 26 2009 12:36PM Matching: endodontics
- [Court report: Guidance Endodontics wins \\$44M in supply agreement](#)
Medical Device Daily: Oct 21 2009 2:03AM Matching: endodontics
- [EBM Announces Release of a DICOM Browser Based PACS 'Pangea Dental'](#)
Medicexchange.com: Oct 16 2009 2:59PM Matching: endodontics
- [Bisceglie Obtains \\$44 Million Jury Verdict](#)
SmartBrief: Oct 16 2009 1:18AM Matching: endodontics
- [DENTSPLY International Inc. Announces Adverse Decision in Contract Litigation Matter](#)
Interest!ALERT: Oct 12 2009 5:23PM Matching: endodontics

Endodontics Patents:

- 7261562- [Water-indicating endodontic monitoring devices](#)
- 7331787- [Characterization of an antibiotic impregnated delivery system as an intracanal medicament in endodontic therapy](#)
- 7338284- [Endodontic instrument and instrument system](#)
- 7357634- [Systems and methods for substituting virtual dental appliances](#)
- 7357636- [Manipulable dental model system for fabrication of a dental appliance](#)
- 7361020- [Dental tray containing radiopaque materials](#)
- 7373286- [Efficient data representation of teeth model](#)
- 7377778- [System for determining final position of teeth](#)
- 7378101- [Vaccine for periodontal disease](#)
- 7390335- [Nanostructured bioactive materials prepared by spray drying techniques](#)
- 7396644- [Method of diagnosing and treating dentinogenesis imperfecta type II by using dentin](#)



[sialophosphoprotein gene and coded product thereof](#)

- 7331783- [System and method for positioning teeth](#)
- 7326051- [Methods and systems for treating teeth](#)
- 7322105- [Methods for manufacturing endodontic instruments by milling](#)
- 7261563- [Methods of filling a root canal with adhesive endodontic cones and polymerizable filling and sealing materials](#)
- 7270541- [Endodontic files having variable helical angle flutes](#)
- 7278852- [Kit of sub-kits for placing a dental post](#)
- 7279038- [Process for affecting the setting and working time of bioresorbable calcium phosphate cements](#)
- 7292759- [Contra-angle rotating handpiece having tactile-feedback tip ferrule](#)
- 7294187- [Rapid-hardening calcium phosphate cement compositions](#)
- 7300281- [Endodontic file having bi-directional scraping edges](#)
- 7303817- [Dental filling material](#)
- 7311522- [Endodontic instruments and method of manufacturing same](#)
- 7320598- [Method for filling and sealing a root canal](#)
- 7398598- [Methods for manufacturing endodontic instruments](#)
- 7402403- [Tumour markers](#)
- 7527642- [Hinged therapeutic mouthpiece](#)
- 7531035- [Resorbable ceramic compositions](#)
- 7553362- [High strength biological cement composition and using the same](#)
- 7553670- [Method for monitoring a polymerization in a three-dimensional sample](#)
- 7575628- [Hydraulic cement compositions and methods of making and using the same](#)
- 7578622- [Contra-angle rotating handpiece having tactile-feedback tip ferrule](#)
- 7578673- [System and methods for combination treatments of dental patients](#)
- 7578674- [Methods for correcting tooth movements midcourse in treatment](#)
- 7588559- [Injection systems](#)
- 7600999- [Systems and methods for fabricating a dental template](#)
- 7523044- [System and method for providing custom fabricated products and catered dental referrals from a retail site](#)
- 7511010- [Pharmaceutical or cosmetic composition and use of a PKC inhibitor with an MMP inhibitor for inhibiting Langerhans' cell migration](#)
- 7494661- [Methods for using tetanus toxin for beneficial purposes in animals \(mammals\)](#)
- 7404967- [Topical product formulations containing strontium for reducing skin irritation](#)
- 7428481- [Efficient data representation of teeth model](#)
- 7433810- [Efficient data representation of teeth model](#)
- 7435083- [Tooth path treatment plan](#)
- 7435086- [Endodontic tool having reduced torque demands](#)
- 7452207- [Methods and systems for modeling bite registration](#)
- 7461982- [Contra-angle rotating handpiece having tactile-feedback tip ferrule](#)
- 7470124- [Instrument for delivery of optical energy to the dental root canal system for hidden bacterial and live biofilm thermolysis](#)
- 7474307- [Clinician review of an orthodontic treatment plan and appliance](#)
- 7481652- [Endodontic reamer and files](#)
- 7602955- [Osteoporosis diagnosis aiding apparatus utilizing panoramic radiographs](#)

Resources from the [NCBI](#) used in this document, [NCBI's standard disclaimer applies](#).

Nothing in this document should be used in place of personal medical advice from your own qualified medical

practitioner. See BioPortfolio.com [User Agreement](#)

Send comments and feedback to:

Peter Barfoot Managing Director, BioPortfolio Ltd.

UK Tel: (+44) 1300 321501

USA Voicemail and Fax: (+1) 415 680 2472

[Peter Barfoot peter.barfoot@bioportfolio.com](mailto:peter.barfoot@bioportfolio.com)

All rights reserved. All other trademarks recognized.

BioPortfolio Limited is registered in England & Wales at Stafford House, 10 Prince of Wales Road, Dorchester, Dorset, DT1 1PW, UK. No.3312883 VAT No. GB 744 6483 10

Copyright 1997-2009 - BioPortfolio Limited.

