

Carl Botvinick
 Richard Somerlott
 Michael Glass
 Allan Jacobs
 Richard Rubinstein
 Richard Gardner
 Gerald Dietz, Jr.
 Mark Dylewski

Alayne Evans
 Edward Fitzpatrick
 Michael Hoen
 Stephen Navarre
 Mark Robinson
 Thomas Vokal
 Jason Lang

Emeritus
 Gerald Dietz, Sr.
 Melvyn Eder
 John Dylewski

Bloomfield Hills - Troy
 50 W. Big Beaver, Ste. 200
 Bloomfield Hills, MI 48304
 248 647-7930

Waterford - Pontiac
 2335 Pontiac Lake Rd., Ste. D
 Waterford, MI 48328
 248 683-2300

Clinton Twp. - Sterling Heights
 15870 19 Mile Rd., Ste. 110
 Clinton Twp., MI 48038
 586 286-3390

Rochester - Lake Orion
 1460 Walton Blvd., Ste. 208
 Rochester, MI 48309
 248 656-1626

Farmington Hills - W. Bloomfield
 31410 Northwestern Hwy., Ste. C
 Farmington Hills, MI 48334
 248 737-1360

St. Clair Shores - Roseville
 18303 E. Ten Mile Rd., Ste. 150
 Roseville, MI 48066
 586 773-2000

Clarkston - North Oakland
 6770 Dixie Highway, Ste. 300
 Clarkston, MI 48346
 248 620-0002

Sterling Heights - Troy
 43114 Dequindre
 Sterling Heights, MI 48314
 586 254-1110

Ann Arbor - Ypsilanti
 315 E. Eisenhower Pkwy., Ste. 220
 Ann Arbor, MI 48108
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EA Clarkston “Pitching” Endodontics

The Endodontic Associates Clarkston office hosted their Grand Opening / 1st Anniversary party at their office in the North Oakland Medical Building on Dixie Highway, just north of Main Street, on Thursday, May 22 from 5:00 pm – 9:00 pm. The casual atmosphere bar-be-cue was held under a tent in the EA parking lot on a picture-perfect Michigan spring evening. Over 235 dentists and staff came by to welcome Endodontic Associates to the neighborhood, grab dinner and a drink, and tour the new office space. A Jazz Trio played during dinner, and the Independence Township Councilman Dan Kelly cut the ribbon at 7:00 pm



Dr. Jacobs, Nate Robertson,
 Dr. Botvinick and Councilman Dan Kelly



Drs. Jacobs and Botvinick with EA Clarkston Staff and Tigers Pitcher Nate Robertson

with **Dr. Carl Botvinick**, and **Dr. Allan Jacobs**, managing partners at the Clarkston location.

The highlight of the evening was the appearance of Detroit Tigers World Series Pitcher Nate Robertson. Robertson met all of the guests, took pictures with everyone and signed autographs. Robertson was gracious with his time, represented the Detroit Tigers honorably and over-delivered for all the guests. Most guests brought items to be signed, but for anyone that did not, Endodontic Associates provided authentic MLB Action Photos of Robertson that he was happy to personalize. ■

Expanding the World of Endodontics

From April 9 through April 12, The American Association of Endodontists held their 2008 Annual Session in Vancouver, British Columbia, Canada. At the event, Endodontic Associates **Drs. Dietz Sr., Dietz Jr.** (AAE Foundation Board of Trustees), **Gardner, Evans, Dylewski, Rubinstein,** and **Hoен** (Chairman of the AAE Evidence Based Endodontics



Committee) all made the trip west into the Canadian Rockies. The appropriate

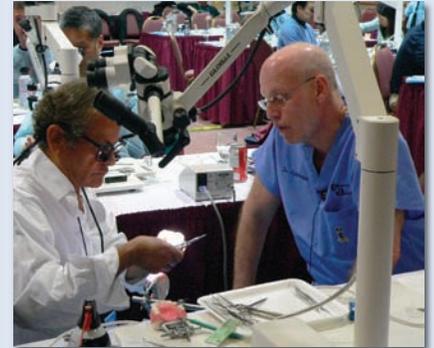
theme for the majestic scenery and future home of the 2010 Winter Olympics was “Expanding the World of Endodontics.” Over 70 continuing education sessions were offered along with many social networking events. The President’s dinner featured former

Saturday Night Live Star Dana Carvey of “Church Lady,” “Wayne’s World,” and “Hans and Frans” fame.

Endodontic Associates led seminars are always popularly attended. **Dr. Richard Rubinstein** ran an all day course on Endodontic Microsurgery. His sold out, hands-on seminar leaves participants with the ability to identify and utilize the microsurgical armamentaria, use a surgical operating microscope, and advance their skills in performing apical microsurgery.

Dr. Michael Hoен presented on how to locate and use evidenced based endodontics in your practice. The session demonstrated and trained doctors to recognize evidence based endodontic relevant databases, access on-line endodontic evidence, and incorporate endodontic electronic evidence into real time clinical practice.

Endodontic Associates has a long tra-



Dr. Richard Rubinstein teaches microsurgical techniques

dition of commitment and service to the AAE. They continue to represent Michigan endodontists in multiple AAE disciplines including clinical teaching, evidence based research, and marketing and public affairs. Endodontic Associates will continue to stay politically active on a national level to work for the advancement of dentistry and endodontics. ■

Clinton Township Endodontic Associates *Relay for Life – May 31, 2008*

Endodontic Associates, Clinton Township Doctors and Staff kept pace again in 2008 in the Shelby Township “Relay for Life” event which was held at River Bends Park on Sunday, May 31st. Endodontic Associates doctors and staff participated in the 24-hour walk which raises awareness and funds to help the American Cancer Society in the fight against cancer.

Endodontic Associates was back for year two on team “Think Pink” led by Margie Conn, the former office manager of **Dr. Mark Sullivan** and former receptionist of **Dr. Kevin Murrell**. Margie

has been cancer free for 3 years and continues to support the efforts of the ACS.

Dr. Richard Somerlott stated, “Tragically, cancer has touched the lives of so many in our community. This is why Endodontic Associates will continue to lend energy and resources to valuable community events and important causes like this one.”

The relay consists of teams throughout Shelby Township, who take turns walking the track and operating booths to help raise money. The laps continued for 24 hours and incorporated themes

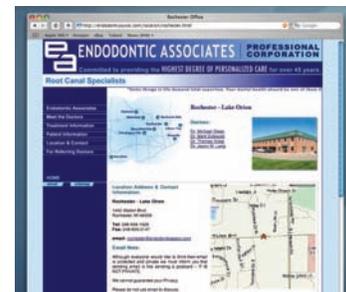
that were both fun (costume lap) and serious (survivors’ lap and luminary lap remembering those who lost their fight).

The Shelby Township Relay was a huge success! There were over 1,000 walkers on 39 teams. In only their second year, Team “Think Pink” contributed \$7,700 (Silver Level) putting them in second place only a few hundred dollars behind the first place team. The Shelby Township Relay donated more than \$109,000 to the American Cancer Society. To quote event organizer, Louise LaFavie, “Cancer does not stop, so why should we.” ■



EA News online at Endodenticassoc.com

Missed any of our EA News issues? All past EA News are archived on endodenticassoc.com and rootcanalinfo.com



Canal Morphology of the Mandibular First Premolar

Success of nonsurgical root-canal therapy (NSRCT) depends on thorough knowledge of root-canal morphology to locate all canals and then properly clean, shape and obturate them. While the mandibular first premolar is typically a single-rooted tooth, 2-, 3- and 4-rooted varieties have been reported. A 1955 University of Washington study found that the mandibular first premolar had the highest NSRCT failure rate of all teeth, 11.5%. Numerous endodontic failures after routine treatment and flare-ups during the course of NSRCT also occur, possibly because of complex variations in root-canal morphology and the difficulty of treating these additional canal systems. Cleghorn et al from Dalhousie University, Nova Scotia, reviewed the literature with respect to the number and type of roots and root-canal mor-

phology. More than 6700 permanent mandibular first premolars were analyzed and weighted averages were determined for number of roots, number of canals and apical foramina, ethnic and gender differences, and case reports of other anomalies. Anatomical studies of 4462 mandibular first premolars revealed complex root morphology. The majority of teeth (97.9%) had a single root; 2 roots were found in 1.8%; 3-rooted (0.2%) and 4-rooted (less than 0.1%) varieties were quite rare. Internal canal morphology was assessed in 4733 teeth. One canal was present in 3586 (75.8%); 2 or more canal systems were found in 1147 (24.2%). In apical anatomy studies, a single apical foramen was found in 2054 (78.9%) teeth; 2 or more were found in 550 (21.1%). A higher incidence of multiple canal systems in the first premolar was found in

African American, Turkish, Chinese and other populations. Most studies disregarded effect of gender on variations.

Conclusion

Most mandibular first premolars have a single root, 24% have 2 or more canals and more than 20% have 2 or more foramina. Anatomical differences were related to race. Constant vigilance locating canal systems ensures the highest degree of clinical success. The use of magnification and enhanced illumination increases the chances for locating canal systems.

Cleghorn BM, Christie WH, Dong CCS. The root and root canal morphology of the human mandibular first premolar: a literature review. J Endod 2007;33:509-516.

Quote of the Quarter

“Trust yourself. Create the kind of self that you will be happy to live with all your life. Make the most of yourself by fanning the tiny inner sparks of possibility into flames of achievement.”

- Foster C. McClellan

Dilaceration: An Endodontic Challenge

A tooth with a straight root and root canal is the exception rather than the norm, as most root canals show some degree of curvature and have multiple planes of curvature throughout their length. According to some authors, a tooth exhibits dilaceration if there is a 90° or greater angle along the axis of the tooth or root whereas others have defined dilaceration as a deviation from the normal axis of the tooth of 20° or greater in the apical part of the root. Jafarzadeh from Mashhad University of Medical Sciences, Iran, and Abbott from the University of Western Australia reviewed this condition and options for managing it.

Dilaceration may result when the calcified portion of the permanent tooth germ is displaced so that the remainder of the permanent tooth germ forms at an angle to it. However, the low incidence of dilacerated permanent teeth is disproportionate to the high prevalence of such trauma. Idiopathic developmental disturbance, a possible cause in cases with no clear evidence of traumatic injury, includes scar formation, developmental anomaly of the primary tooth germ, facial clefting, extensive root-canal infections, ectopic development of the tooth germ and lack of space, anatomic structures

that might deflect the epithelial diaphragm, the presence of an adjacent cyst or tumor and hereditary factors.

Crown and root dilacerations complicate treatment, so clinicians must use care to avoid mishaps in such teeth. Diagnosing root dilacerations before commencing endodontic treatment facilitates the safe use of instruments within the curved canal. Failure to recognize the multiplanar nature of the dilaceration might contribute to a higher rate of failure.

Direct access to the apical foramen is an important benefit gained through access cavity preparation. In dilacerated teeth, especially if there is any internal calcification or resorption, it is often difficult to explore and negotiate the canal, resulting in canal blocking, ledging, transportation, zipping, perforation or instrument breakage. It is therefore essential to precurve all hand files to facilitate canal negotiation. While instruments with noncutting tips and those made from nickel-titanium help maintain root-canal curvatures in many teeth, some rotary instruments may not be suitable because of the severe nature and extent of the curvatures.

The use of multiple file recapitulations with copious irrigation is required and

should be repeated more frequently in all curved canals. The use of thermoplastified root-filling techniques may be difficult to perform because of the severity of the canal dilaceration. Root dilacerations also concentrate the occlusal stresses in the supporting structures and should be considered as a risk factor in abutment selection. Increased stress might affect the stability and longevity of the abutment tooth and that of the prosthesis.

The prognosis of endodontically treated dilacerated teeth varies according to the severity of the deformity and the practitioner's skills. In many cases, the prognosis will not become evident until it is determined whether the canal can be negotiated completely and then adequately debrided, disinfected and obturated.

Conclusion

Dilacerated teeth pose a number of diagnostic, management and prognostic challenges to dental practitioners. Once identified, the effect of this anomaly on the endodontic and restorative dental management of the tooth can be more fully assessed.

Jafarzadeh H, Abbott PV. Dilaceration: review of an endodontic challenge. J Endod 2007;33:1025-1030.

Endodontic Associates Welcomes Two New Associates

Dr. Tiffeny Chimelak and **Dr. Craig Duhaime** will join EA in August. Dr. Tiffeny Chimelak will practice in the Farmington Hills location with **Dr. Richard Rubinstein**.

Dr. Craig Duhaime will practice in the Waterford and Clarkston locations

with **Drs. Carl Botvinick** and **Allan Jacobs**.

Both doctors look forward to serving the surrounding dental communities and developing lasting professional relationships with all our referring doctors.

EA is pleased to have recruited these

two young talented professionals and we look forward to many years of collegiality.

Look for our Fall EA News where we will have profiles on both doctors and a special feature on the locations where they will be practicing. ■