

Gerald C. Dietz, Sr.    Richard Rubinstein  
 Melvyn Eder            Mark Dylewski  
 John Dylewski         Alayne Evans  
 Carl Botvinick         Edward Fitzpatrick  
 Richard Somerlott    Michael Hoen  
 Michael Glass         Vlad Tismenetskiy  
 Allan Jacobs           Stephen Navarre  
 Richard Gardner      Mark Robinson  
 Gerald Dietz, Jr.

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 50 W. Big Beaver #200  
 Bloomfield Hills, MI 48034  
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 2335 Pontiac Lake Rd.  
 Waterford, MI 48328  
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 15870 19 Mile Rd. #110  
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 810 286-3390

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

**Farmington Hills - W. Bloomfield**  
 31410 Northwestern Hwy. C  
 Farmington Hills, MI 48334  
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 Roseville, MI 48066  
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 315 E. Eisenhower Pkwy. #220  
 Ann Arbor, MI 48108  
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## Cool Breeze on a Hot Night



EA Hosts Sada, Paula, Dani (front left-right)  
 Christy, Kim, Jamie (back left-right)



"No Worries Mon"

The Endodontic Associates staff at the Bloomfield Hills location hosted a "staff only" party for the staff of doctors that refer to the Bloomfield Hills office at Bahama Breeze restaurant in Troy on Monday, September 22, 2004. The party ran from 6:00-10:00 p.m. on the Bahama Breeze deck.

Dental office staff members, wearing festive leis, enjoyed the warm Indian Summer night sipping tropical frozen margaritas and daiquiris (Bahama Breeze's specialty) and sampling Caribbean-style hors d'oeuvres.

Attended by over 100 people, the event provided a relaxing evening away from the pressures of the office. The Bloomfield Hills EA staff had the opportunity to renew associations with long-time

friends and meet new employees of referring doctors in hopes of improving the communication between the offices. Endodontic Associates' doctors **Jerry Dietz, Sr., Jerry Dietz, Jr., and Vlad Tismenetskiy** were on hand to answer any questions, but were quickly put to the task of serving up frozen drinks.

All attendees participated in a raffle for Somerset Gift Certificates, 2005 Entertainment Books, and, the Grand Prize; 2 Club Seat Tickets to a Lions game at Ford Field. Many in attendance said, "they were happy to personally meet the EA staff who would no longer be just a voice on the phone."

Get ready for more exciting Endodontic Associates events in your area in 2005! ■

## USA Golden Smiles

Peter Vanderkaay son of **Dr. Mark Vanderkaay**, DDS of Royal Oak Michigan represented Team USA at the 2004 Olympic Games, winning a Gold Medal in the 800-meter free relay.

Peter, a junior at the University of Michigan qualified for the Olympics in July and went on to intensive training where he met his teammates in the 800-meter relay, Michael Phelps, Ryan Lochte and Klete Keller. In the historic finals heat in Athens, Greece on August 18, 2004, Phelps took the lead on the first leg, Lochte increased team USA's position on the second leg, Vanderkaay maintained the lead on the third leg and Keller brought home the gold in the anchor leg besting the Australians by .13 of a second.

Three of Dr. Vanderkaay's sons, Peter, Christian a senior, and Alex a freshman are all swimming together for the University of Michigan in Ann Arbor. Michael Phelps also swims with the Vanderkaays for the Wolverines.

Endodontic Associates would like to congratulate Peter Vanderkaay and his very proud father, **Dr. Mark Vanderkaay**. We wish him and his family much success in the future. ■



## Quote of the Quarter

***"The Great dividing line between success and failure can be expressed in five words: I did not have time."***

by Franklin Field

# Assessment of Various Vital Pulp-therapy Materials

In pulp-capping and pulpotomy techniques, a biocompatible or bioinductive material is placed over the exposed pulpal tissue. Histologically, various materials have been studied including a number of calcium hydroxide ( $\text{Ca}(\text{OH})_2$ ) formulations. Though mineral trioxide aggregate (MTA) and different formulations of acid-etch dentin-bonding (AEDB) materials have recently been advocated, they have only been evaluated histologically, and it is not clear whether the chemical makeup of the hard-tissue barrier formed in response to these vital pulp-therapy materials has the same element composition as sound dentin.

Dominguez et al from Baylor College of Dentistry, Texas, performed pulp-capping and pulpotomy procedures on 15 male mongrel dogs. Three materials were used in this study: (1)  $\text{Ca}(\text{OH})_2$ , (2) AEDB and (3) MTA. Six of the animals were sacrificed at 50 days, and 9 were sacrificed at 150 days. Samples from 11 dogs were used for histological evaluation, and scanning electron microscopy analysis was performed on the remaining dogs. The weight percentage of elements found in the dentin of a nontreated tooth vs the bridge formed in the exposed specimen was also established.

Pulp inflammation with vital pulp-therapy treatments with MTA was not significantly different from the un-treated control group, both in pulp-capping procedures at 50 days (Figure 2) ( $p = .357$ ) and at 150 days ( $p = .198$ ). With pulpotomy procedures, MTA resulted in organic concentrations of carbon and sodium that were closer to the control. Conversely, AEDB had a higher oxygen component than MTA and  $\text{Ca}(\text{OH})_2$ , making AEDB a more aerobic environment than MTA or  $\text{Ca}(\text{OH})_2$ . With regard to the calcified component of the bridge,  $\text{Ca}(\text{OH})_2$  was closer to the control for the entire set of mineral components, followed closely by MTA and less so by

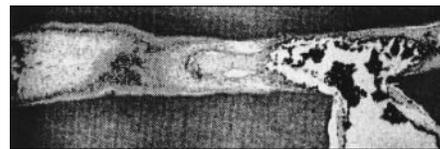


Figure 2. Pulp capping with MTA at 50 days showing impaction of the material in the pulp. No bridge formation is evident. Normal pulp underlines the material impaction (original magnification 10x).

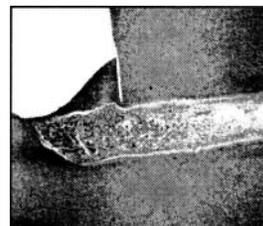


Figure 3. Pulp capping with  $\text{Ca}(\text{OH})_2$  at 50 days showing bridge formation and abscess under the bridge (original magnification 10x).

AEDB.  $\text{Ca}(\text{OH})_2$ , therefore, creates a bridge that is probably similar to normal dentin (Figure 3). Compared with  $\text{Ca}(\text{OH})_2$ , MTA may have superior sealability properties and be less cytotoxic to the tissues.

On a comparative basis, MTA gave the best pulpal responses to pulp capping and pulpotomy. MTA had fewer cases of pulpal necrosis, with none of the cases showing necrosis in the short term and only 10% of the cases necrosed in the long term. In pulp-capping cases, MTA was superior to  $\text{Ca}(\text{OH})_2$  and AEDB regardless of time. In pulpotomy procedures, MTA, AEDB and  $\text{Ca}(\text{OH})_2$  performed similarly in the short term, whereas MTA was significantly better in the long term. Finally, MTA gave a more predictable, positive response to vital pulp therapy than  $\text{Ca}(\text{OH})_2$  and AEDB at longer timeframes.

Based on this study, MTA appears to be the material of choice when treating an exposed pulp. However, with pulpotomy success rates of greater than/equal to 92% currently achievable, one should reserve partial pulpal treatment for specific cases and specific reasons.

Dominguez MS, Witherspoon DE, Gutmann JL, Opperman LA. Histological and scanning electron microscopy assessment of various vital pulp-therapy materials. ■

## Donated Dental Services

Endodontic Associates is honored to partner with the MDA's Donated Dental Services Program. The Program helps indigent, elderly or handicapped people obtain expert dental care with dignity. MDA volunteers treat patients in their offices, around their schedules and at no charge.

As recognized by President George W. Bush, "Our nation is blessed with dental professionals who are passionate about their work and care deeply about the lives of their patients. By donating their time and talents to helping those in need, DDS participants bring much needed services to many and contribute to a brighter future for our country. Your inspiring efforts strengthen your community and help to transform our Nation, one heart and soul at a time."

Endodontic Associates doctors were responsible for over \$13,000 in donated endodontic care in 2004 through the Donated Dental Services Program. Additionally, Endodontic Associates donated over \$150,000 of endodontic care for other referred patients in need. All seven Endodontic Associates offices and all EA Doctors participate in the MDA Donated Dental Services Program.

According to EA Doctor **Carl Botvinick**, "It is so easy to get involved. You decide who you will treat. You don't have to leave your office. There are no intensive administrative procedures and you are making a significant difference to the patient's well being."

The EA Doctors find that because the patients are pre-screened there is no doubt the referred patients are in great

need of their help.

The MDA DDS Program is currently so short on dentists and overloaded with patients that they have had to stop accepting new patients to the program. Judith Berry, Referral Coordinator of MDA DDS said, "We are thankful for the efforts of Endodontic Associates in their care of patients and recruitment of dentists. Our best recruits for this program are other dentists."

The program is funded by the Michigan Department of Community Health and is administered with assistance from the Foundation of Dentistry for the Handicapped and Delta Dental Plan of Michigan. For more information or to get involved call 800-850-5913 or visit [www.nfdh.org](http://www.nfdh.org). ■

## Antibiotic Susceptibility of Bacteria Isolated from Abscesses

Recently, Baumgartner and Xia from Oregon Health and Science University, Portland, reviewed the dental literature indicating bacteria have developed resistance to the currently recommended antibiotics. Using the Etest, the authors studied the antibiotic susceptibility of 98 strains of bacteria isolated from 12 active endodontic abscesses. The antibiotics used in the test were: (1) penicillin V, (2) amoxicillin, (3) amoxicillin + clavulanic acid, (4) clindamycin, (5) metronidazole and (6) clarithromycin.

The clinical samples were aseptically aspirated from each abscess and transported to the laboratory in an anaerobic container. To obtain confluent growth, each strain of bacteria was grown in broth to a turbidity of 0.5 McFarland density and streaked with a cotton swab

of 150 mm in diameter across Brucella blood-agar plates (Anaerobe Systems, San Jose, Calif.). Etest strips with the different antimicrobials were placed on the plates. After incubation in an anaerobic chamber, an ellipse of inhibition around each antibiotic strip was read to determine the minimum inhibitory concentration (MIC), which was then calibrated in  $\mu\text{g/mL}$ .

The percentages of susceptibility for the 98 species were: (1) penicillin V, 83/98 (85%); (2) amoxicillin, 90/98 (91%); (3) amoxicillin + clavulanic acid, 98/98 (100%); (4) clindamycin, 94/98 (96%); and (5) metronidazole, 44/98 (45%). However, when metronidazole was used in combination with penicillin V or amoxicillin, susceptibility of the combination increased to 93% and 99%, respectively.

In conclusion, penicillin V, because of its efficacy in polymicrobial infections, low toxicity, low cost and the relatively narrow spectrum of bacteria found in endodontic infections, appears to be the antibiotic of choice. Amoxicillin and amoxicillin/clavulanate, because of their more rapid and sustained plasma levels, should be considered for the more serious infections. Clarithromycin appears to be an excellent alternative to erythromycin for mild infections when penicillin cannot be prescribed. Though clindamycin is also an excellent alternative for patients allergic to penicillin, it is best used when there has not been a positive response to penicillin and/or when the signs and symptoms indicate the infection involves anaerobes. ■

## New Young Dentist Society

**Dr. Vlad Tismenetskiy** of Endodontic Associates' Bloomfield Hills and Farmington Hills offices helped organize the first meeting of the Oakland County Young Dentist Committee. The inaugural seminar held on Thursday, December 16, 2004 from 6:00-8:00 p.m. at the Bloomfield Township Public Library featured guest speaker Mr. Damon Dyas, a Certified Financial Planner from American Express Financial Advisors.

The Committee, which is part of the Oakland County Dental Society, is chaired by **Dr. Doug Henke** (DDS, Birmingham), and includes **Drs. Vlad Tismenetskiy, Tim Steimel** (DDS, Royal Oak), **Shikta Batra** (DDS, Troy), and **Greg Lurcott** (DDS, Warren)

The Young Dentist Committee's goal was to bring together young dental professionals for an evening of networking, friendship, and financial education. Continuing education credit was given to the more than 30 attendees. The Young Dentist Committee meetings are a low pressure introduction to the Oakland County Dental Society. The



(Left to right) Dr. Vlad Tismenetskiy, Dr. Tim Steimel and Dr. Richard Bagdaserian

meetings are open to all interested dental professionals regardless of Oakland County Dental Society membership status. All young dentists and new dentists are encouraged to attend future meetings. The next meeting is scheduled for March 3, 2005.

For more information on the Oakland

County New Dentist Committee please contact Brigette Boyungs, Oakland County Dental Society Executive Director at 248-540-9333 or via email at [ocdsdental@aol.com](mailto:ocdsdental@aol.com), or you may contact **Dr. Vlad Tismenetskiy** at Endodontic Associates at [vtismen@msn.com](mailto:vtismen@msn.com). ■

## Clinton Township – Roseville Seminar

On Thursday, November 4, 2004, the doctors of the Clinton Township and Roseville offices of Endodontic Associates hosted their Second Annual Seminar at Macomb Center in Clinton Township. Organized by **Drs. Richard Somerlott, Edward Fitzpatrick, Michael Hoen, and Stephen Navarre**, the lecture provided continuing education credits for all attendees.

**Dr. Michael Hoen** presented a two part lecture covering digital radiography

updates, and an explanation of endodontic instrumentation materials and techniques. The digital radiography content provided dentists with an overview of digital equipment, techniques, systems, costs, and the moving trend away from film to digital imagery. The second topic provided an analysis of the different rotary file systems illustrating the uses, risks, and costs of each system with a series of case presentations.

Endodontic Associates has been a

leader in continuing dental education for years. They are constantly making an effort to share information on the most up-to-date endodontic tools, materials, and techniques with dental professionals. The seminar provided valuable information to over 70 dentists in attendance.

Endodontic Associates will continue to organize educational seminars throughout Southeast Michigan. Please join EA for future seminars in your area. ■