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MDDS Connections for Metro Denver's Dental Profession

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Inside This Issue:

MESSAGE TO OUR READERS:
CALL FOR ARTICLES – SUBMIT YOURS TODAY!

The *Articulator* belongs to you, our readers. Share your in-depth subject knowledge, events and accomplishments with the Metro Denver dental community. By submitting articles, photos, happenings, etc. to us for consideration, article submissions are open to members and vendors in the Dental community.

Please submit your articles, photos, etc. to CT Nelson, Managing Editor, at creative@mddsdentist.com.

WELL AS THEY SAY, ALL GOOD THINGS MUST COME TO AN END...

By Larry Weddle, DMD, MS

As I find myself writing my last letter to all of you as your President, the old phrase "all good things must come to an end" races through my mind. I have volunteered at MDDS headquarters in some capacity since 2008. It has been an honor and privilege to serve such a wonderful Society. The thing I have enjoyed and will miss the most is serving alongside my fellow board members, volunteers and MDDS' wonderful staff.

I take great pride in being part of some of the most exciting, challenging and best years in MDDS' one hundred-plus year history. The RMDC has continued to grow in popularity as attendance and revenue reached an all-time high this past year! It was also truly a pleasure to host the inaugural Awards Gala & President's Dinner at this year's convention. This is the premier event to celebrate organized dentistry and recognize our selfless volunteers who give their valuable time to serving the membership.

MDDS, being a local component society, is all about providing valuable member services. Just in case you have been under a rock for the last three years and aren't aware, we now have a state of the art lecture hall/clinic/hands-on facility downtown! MDDS was awarded the ADA Golden Apple in January our progressive thinking and execution of the Mountain West Dental Institute. This was the "BIG" project while I served as an MDDS Standing Officer. For all of us directly involved and for those of you who have supported this project with your time and donations, you should be proud of what we have created for our current membership and future generations.

I want to thank my fellow Board members that I have served alongside; especially the past-presidents for their leadership and mentorship. A special thanks to our Executive Director, Elizabeth Price, and her staff for their dedication to the Society and executing the wishes of our Board and supporting our mission at a degree rarely seen at the local level. And last, but certainly not least, I want to be the first to welcome my friend and colleague, Dr. Ian Paisley, who takes the reigns as your next President on July 1st. Although he will be our youngest president in MDDS' history, I believe he will be one of the most prepared presidents in our history. He has been intimately involved with organized dentistry since he was a dental student and has a passion for organized dentistry and our Society that is matched by few.

With that being said, I hope to see many of you at the upcoming and at CDA Annual Session in beautiful Beaver Creek. Thank you again for the trust and support this past year. It has been my pleasure to serve. ■

Metro Denver Dental Society's Afternoon with the Rockies – 4-12-15

Dr. Eric Beckman, Dr. Isael Aleman, Dr. Sasha Nouri, Dr. Ian Paisley, Ms. Elizabeth Price and Dr. Melissa Goodpaster

CU student Ms. Jenna Hyer and Ms. Erica Carvin

Drs. Jordan York and Chris Rogowski

Dr. Todd Crandall and son

Dr. Kareen McIntosh's staff members

New Members, Welcome!

Dr. Lauren R. Hanzlik
Dr. Amisha P. Revawala
Dr. Ashley D. Tran
Dr. Isael Aleman
Dr. Nitan A. Bahnson
Dr. Nathanael D. Bannon
Dr. Erica E. Beaty
Dr. Brock A. Booton
Dr. Tyler D. Borg
Dr. Jacquelyn E. Cox
Dr. Sean M. Davis
Dr. Jacob Dunham
Dr. Krista M. Eckhoff
Dr. Emilia N. Garrison
Dr. Christopher M. Green
Dr. Kristin M. Haun
Dr. Cindy T. Hebert
Dr. Michael P. Holmberg
Dr. Hazha O. Ibrahim
Dr. Molly T. Johnson
Dr. Robert E.R. Johnson
Dr. Mehron Kazemi
Dr. Shawn L. Kimball
Dr. Carolyn S. Kittell
Dr. Christy L. Kopasz
Dr. Ryan A. Lemke
Dr. Manisha K. Makhija
Dr. Jamie M. Marquez
Dr. Veronica C. Matthews
Dr. Leah C. McQuigg
Dr. Patricia Moreno Cabrera
Dr. Divya B. Nagaraj
Dr. Hadi Nassif
Dr. Huong G. Nguyen
Dr. Jenna A. Nicholson
Dr. Emmanuel D. Paguio
Dr. Joshua T. Peter
Dr. Paul J. Quiram
Dr. Amy S. Rasinsky
Dr. Jason K. Read
Dr. Tracy E. Sales
Dr. Brian A. Severance
Dr. Amisha Singh
Dr. Kelly M. Smith
Dr. Susan M. Somerset
Dr. Jay D. Talbot
Dr. Emese Tokos
Dr. Derie R. Trujillo
Dr. Chelsea L. Vraney
Dr. Naomi S. Willden
Dr. James R. Woller
Dr. John K. Zalesky

Metro Denver Dental Society's New Member Event – 4-30-15

Drs. Grace Rudersdorf, Melissa Hinze, Marin Rosenvold and Melissa Goodpaster

Drs. Diane Fuller and David Klekamp

Dr. Klekamp laying out the game plan

CU Signing Day – 5-5-15

CDA and MDDS hosted a signing day (with burritos!) at the University of Colorado School of Dental Medicine

Dr. Alex Barton talking to CU students about the benefits of Tripartite membership

Tripartite applications getting completed

CU Students at MWDI – 5-6-15

Incoming MDDS President Dr. Ian Paisley welcoming CU students to a course at the MWDI

DO LESS, BE MORE

By Brandon Hall, DDS, Editor

Last week I made a huge life decision: I purchased my own home. Granted, it's just a duplex, but I'm now a homeowner. It's kind of weird to say, honestly. After I officially closed, I excitedly went over with keys in hand and walked into my new empty home. Upon doing so, I had a moment of not only reflection and excitement but of significant trepidation. While I'm excited to begin this new phase of my life, part of me said, "Where have the last 35 years gone, and why so quickly?"

It seems like yesterday I was in the University of Iowa dental school laboratory trying to set denture teeth and sculpt wax into what I thought looked like gums. Little did I know, I would never do this again. Nervous about the next day's Endo exam I anxiously awaited the weekend college football game and house parties that followed. While I was broke and seemingly confused about what in the world life was going to be like after dental school, things were relatively simple and straightforward. There was an "outline" for where to go and what to do. You followed the syllabus for school and life activities came with it.

Now, in the blink of an eye, I'm almost 10 years out of dental school and another Colorado summer is upon us. For me and most others, this means a busy schedule: camping and biking trips, Red Rocks concerts, family reunions, dental study clubs/state meetings, dinner with reps and specialists, etc. Not to mention running a dental practice. It's a seemingly endless list of things with which to jam pack our lives with. Being "super busy" has somehow become a badge of honor. Cramming your social calendars with as much stuff as possible has not only become "ideal," it's celebrated. This was me for the better part of the last five years. It seemed like I was always saying "yes" to whatever presented itself. And it was burning me out. Also I wasn't able to give myself 100% to the commitments I had. So I decided to change recently. I made three huge changes to my life calendar and it has helped tremendously, not just emotionally but financially as well. Perhaps some of you can take away a pearl from these tips and use them in your lives.

1) Setting aside ME time. For me this is Saturdays. I don't schedule anything and I don't commit to anything 90% of the time. It's the part of my week where I do something I enjoy (i.e. mountain biking, hiking or reading a book). It allows me to decompress from the week prior and get geared up for the upcoming week. It's my flex day. I can use it however I want. It's my buffer zone in between hectic weeks. Obviously a whole day is a lot (I can afford that being single and having no kids) but maybe for you it's one hour in the morning before work where you sit and enjoy a cup of coffee. Or perhaps where you workout before going to the office. Don't check your computer, don't look at text messages, just spend some time doing things that benefit you.

2) Picking up a hobby you've always wanted to learn. I had always wanted to get into digital photography, so I took a four week class. I learned how to take better landscape, portrait and model photos. Now that I have this newfound knowledge, I can utilize it to create cool photos. It allows me to see the world in a different light and appreciate the beautiful surroundings Colorado has to offer. Perhaps for you it's playing the piano or taking climbing lessons. Something that is NOT dental related. If not now, when?

3) Being in the NOW. My life seemed to be a blur. It was always about the next day or the next month, or the next patient. Now I've made a conscious effort to enjoy the moment. I take at least 10 minutes before bedtime and think about my day. Reflect about the decisions I made and what I'd do differently. When I'm on a trail ride I stop and take in the scenery for a few minutes. In the office, I spend an extra minute or two and ask patients about their days. In our social media generation, it's a chaotic mix of pictures, videos, posts, blogs and check-ins. Before you know it, your day is over. I encourage you to slow down.

What I've found is that when I slow down a little bit, I'm a more focused person. I spend a little less time on Facebook. I don't immediately check my e-mails until I get to the office. I encourage you to do less and be more. ■

LETTER TO THE EDITOR

Dear Editor,

I have been reading the "Pathology Puzzler" that you publish and find it a very nice addition to the journal. If there is one piece of advice I would give to clinicians, it is that every lesion is cancer until proven otherwise. That way a malignant lesion will always be in the differential diagnosis and not be ruled out until a definitive procedure is done in a timely fashion.

Sincerely yours,
Dr. Richard D. Zallen

Response from the Editor:

Dr. Zallen, I'm glad you like the new part of the *Articulator*. We have been trying to introduce clinical applications to the *Articulator* as much as possible and have been getting great feedback regarding them. We'll continue them in the future and appreciate constructive criticism and/or praise of them.

In response to your letter, I absolutely agree with you that oral cancer should always be included in the differential diagnosis. Only if and when it's ruled out (definitively by soft tissue pathology), then it can be excluded from the diagnosis. That said, clinicians, especially general practitioners, should use their education and experience when determining whether or not to have the patient see a specialist for a definitive biopsy and treatment or to use a "watch and wait" approach. I always feel it's nice to have oral surgeons, pathologists and periodontists available for patients to attain consultations. If I have any questions or doubts in my mind about a soft tissue lesion, it's my fallback.

Brandon Hall, DDS

THE IMPORTANCE OF EXPANDING YOUR DENTAL ASSISTANTS' KNOWLEDGE

By Shannon Pace Brinker, CDA, CDD

Introduction

Today's cosmetic dental practices are challenged to provide comprehensive treatments to esthetically demanding patients in ways that cater to their functional and emotional needs. Dentists can capitalize on the inherent interpersonal and communication skills of their dental assistants. By helping to expand their dental assistants' knowledge and proficiency in different technical aspects of restorative practice, dentists can empower them to accept greater responsibility for communicating detailed case information to patients and laboratory technicians.

In particular, dental practitioners can use training concepts from the lectures at the Rocky Mountain Dental Convention to help their dental team better understand the new patient exam. This includes vital records such as digital photography, facebow transfer, pvs impressions, CR bite records and pouring and mounting diagnostic models. In particular, when dental assistants understand and are trained in the use of mounted diagnostic models for visualizing the necessary functional and esthetic changes. This article outlines how dentists can involve their dental assistants in the planning procedures required to provide comprehensive dental treatment; enhance their understanding of the technologies and materials necessary to ensure predictable results; and broaden their familiarity with occlusion/function principles.

Explaining How to Obtain the Necessary Records

Dental assistants can play a significant role during the records appointment by taking quality digital photography, diagnostic impressions, pouring casts, mounting models on the articulator and obtaining facebow and other records.

Taking Quality Diagnostic Impressions

Caution your dental assistant that diagnostic impressions should be handled with the same attention to detail as impressions taken for a final crown or bridge. The dental assistant should understand the level of scrutiny with which diagnostic impressions will be examined, as they will be used for diagnosis, treatment planning, diagnostic waxing and eventual provisional fabrication. Emphasize the need to obtain extremely accurate impressions. Dentists might consider recommending the use of an alginate replacement polyvinyl siloxane impression material with a light-body wash (Flextime Putty, Heraeus Kulzer Explain that this material category will enable multiple pours, if necessary, and eliminate the need to pour the model immediately (Figure 1). Additionally, dentists can provide specific instructions about this procedure, including the need to dry the teeth prior to placing the impression material to ensure that all of the surfaces of the teeth are captured. Explain that a quality impression includes the details well beyond the free gingival margins of the teeth, the entire buccal and lingual vestibules and the entire hard palate.

Creating Quality Casts Be sure that your dental assistants understand

figure 1

the need to follow the water-powder ratio for the specific stone being used (e.g., Fujirock, GC America, Inc.; Alsip, IL) when pouring casts. The use of a vacuum-mixing machine also is recommended to eliminate air in the mix. Explain that this results in bubble-free, dense casts for maximum accuracy.

Using A Corrected Facebow Transfer

Similarly, the importance of ensuring accuracy when obtaining a facebow transfer may not be fully understood by dental assistants until the rationale for its use is explained. Therefore, cosmetic dentists can ensure their dental assistants' understanding of why facebow transfers are needed by explaining that their purpose is to enable the

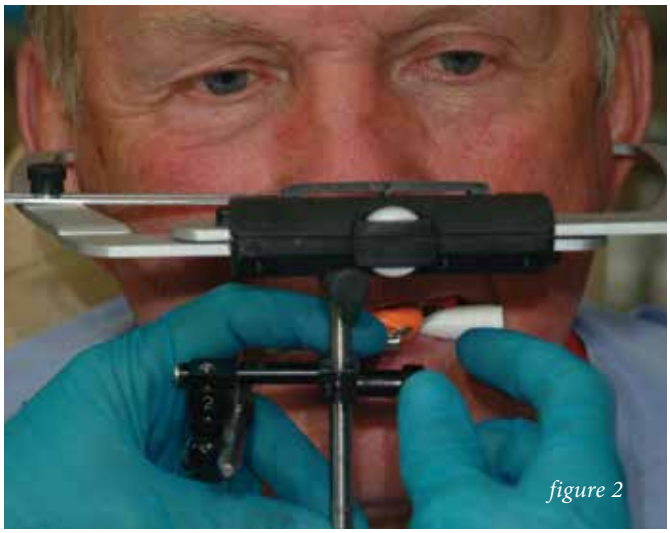
figure 2

maxillary cast to be mounted on the articulator in the exact same orientation to the skull that the maxilla is when the patient is standing up straight.

Dentists should also explain that the distance from the maxillary

incisal edge to the axis of rotation of the mandible should also be duplicated when the facebow is mounted in the articulator. However, simply understanding the purpose of these tools does not guarantee successful outcomes. Therefore, dentists can help ensure that their dental assistants will be successful by providing instruments that enhance the predictability of the facebow process. For example, a simple earbow type of facebow (Slide-o-matic, Whip Mix Corp.) (Figure 2) can be used in combination with a rigid bite registration material (Venus Bite, Heraeus Kulzer) to mount the maxillary cast. Additionally, dental assistants can be made aware that some patients' ears are not level, which can lead to the incorporation of a cant to the maxillary incisal plane. As a result, dentists may recommend that they use a bubble level (Great Lakes Orthodontics; Tonawanda, NY) to ensure that the facebow is level with the floor when the patient is standing upright.

Working With Articulators

Although the use of articulators may be part of everyday routines in the cosmetic practice, that does not mean that dental assistants understand why. To fully involve them in the process, dentists can educate their assistants about the purpose and function of articulators as well as emphasize why a quality articulation system is worth its weight in gold to the restorative practice. Demonstrate why such features as an ability to accept a facebow transfer and condyle guidance that can be altered when necessary are most important to cosmetic dentists. To facilitate the staff's ability to use the instrument, dentists might consider selecting an articulator that their laboratory uses so that their staff can be taught to use them on a daily basis and feels right in their hands. One of the simplest articulators available was designed by Dr. Peter Dawson.

(Combi 2 Articulator, Whip Mix Corp.; Louisville, KY (Figure 3).

Recording Centric Jaw Relation

Although there are several methods for recording centric relation (CR), dentists may want to instruct their dental assistants in their preferred method for finding, verifying, and recording CR. One such method is bimanual manipulation, as described by Dr. Dawson.Taking the time to teach dental assistants this technique will add predictability to the diagnosis and treatment of occlusally driven restorative treatment. Therefore, consider teaching dental assistants how to position the patient, properly position the hands, and employ the proper pressure when using this technique to record CR.

Mounting The Models

The independent procedures previously described—taking accurate impressions and making quality cases, working with articulators and using a corrected facebow transfer, and recording CR—make even more sense when the cumulative results of their use are brought into unified context for the dental assistant. Therefore, cosmetic dentists can explain the significance of mounting the models to their dental assistants, as well as how to use all of these collected "information tools" during the diagnosis and treatment planning process. Additionally, dental assistants should be instructed in how to mount the models to ensure that the precise bite relationship is recorded clinically. Such training can begin with a demonstration of how contemporary facebow systems enable the mounting jig to be separated from the earbow, which allows easy mounting of the maxillary cast on the articulator, so that the corrected facebow technique previously described can be employed to position the maxillary cast on the instrument. Then, dentists can provide instruction in how to stabilize the maxillary cast using a rubber band and mount it with mounting stone.

Finally, the importance of CR can be translated for dental assistants by relating the mandibular cast to the maxillary cast and stabilizing it using a hot glue gun with four nails. Dentists can further instruct their assistants to mix and place stone between the cast and the mounting plate, without fear of inadvertently rocking the lower model.

Conclusion

Today's dental assistants are more than just chairside assistants. When educated and trained in different technical aspects of restorative practice, dental assistants become partners to the dentist and laboratory technician, as well as better communicators and advocates on behalf of the dental patient. ■

About the Author

Shannon Pace Brinker, CDA, a National and International Speaker and published author and a 1994 graduate of the Dental Assisting Program at Bowman Gray School of Medicine, works with Dr. Dan Etheridge in his private practice in Chesapeake, VA. She has been a full time practicing dental assistant for over 22 years.

PATHOLOGYPUZZLER WITH DR. JOHN SVIRSKY

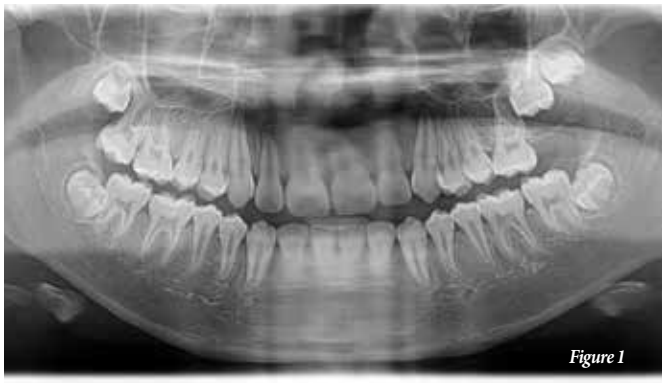

Figure 1

A 13-year-old Asian American male was referred to a local oral surgeon for evaluation and treatment of an asymptomatic, non-expansile radiolucent lesion associated with impacted teeth numbers 15 and 16 (Figure 1). The lesion measured 2.5 by 1.5 cm in greatest dimension and surrounded the crowns of teeth 15 and 16, preventing their eruption. The patient's medical history was uneventful and his only medication was for an asthma inhaler, which was used sporadically.

Based on the clinical findings, which of the following would you include in a differential diagnosis?

1. Dentigerous cyst
2. Odontogenic keratocyst
3. Ameloblastoma
4. Odontogenic myxoma
5. Central giant cell granuloma
6. Ameloblastic fibroma
7. Adenomatoid odontogenic tumor
8. Calcifying odontogenic cyst
9. Calcifying epithelial odontogenic tumor
10. Ameloblastic fibro-odontoma

Answers on pg. 29

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GOODBYE MAG STRIPE— HELLO EMV

By Jennifer Nieto, President of Best Card, LLC

MasterCard/Visa established October 2015 as the timeline for merchants to have EMV chip technology in place. This technology will require that chip cards stay in the equipment (terminal or pin pad attached to terminal or online system) until the transaction is complete. Non-EMV equipment will most likely continue to work after October 2015, but you will want EMV equipment by then so as to prevent a potential liability shift to the merchant should fraudulent activity happen. Most processors will have EMV certifications on equipment by the second Quarter of 2015. See if your present equipment will get EMV certification: bestcardteam.com/uploads/Terminal_Lifecycle.pdf

Europay, MasterCard® and Visa® (EMV) is the sophisticated integrated-circuit (IC) "chip" technology that will eventually replace the magnetic stripe on credit cards that has been the standard in the United States since 1960. EMV technology uses dynamic data (versus static data that is on a magnetic stripe and is easily stolen these days) and should help reduce credit card fraud and identity theft. EMV has already replaced magnetic-stripe cards in 60 countries (including Canada and most of Europe), and the card associations (such as Visa, MasterCard, Discover and American Express) have begun phasing in the EMV technology in the United States. You many already have cards in your wallet with the EMV chip – they will have a metallic square on the front of the card.

If a patient presents a card which contains an EMV chip and you swipe the magnetic stripe instead of using a chip reader – and the card is fraudulent – you will have no recourse and will lose any related chargeback.

What does this liability shift mean to you? While EMV is not a mandate, you will want to have this technology by October 2015 to avoid a liability shift to you, the merchant, should a fraudulent or stolen card be presented at your office. If a patient presents a card which contains an EMV chip and you swipe the magnetic stripe instead of using a chip reader – and the card is fraudulent – you will have no recourse and will lose any related chargeback.

Should you purchase new equipment NOW? We advise YES – because the cost of the equipment could be offset by NOT LOSING one large-ticket chargeback. EMV will eventually be the standard world-wide and we feel it will be a more secure system.

What is NFC or Contactless technology? NFC means "Near Field Communication" and new EMV terminals should also feature contactless readers which allow patients to wave their NFC chip credit card or cell phones (with Apple Pay and/or Google Wallet) across the reader to process transactions. Credit cards with NFC chips will have a picture of a sound wave, or something like this:))) And you can see video of Apple Pay transactions on the web: youtu.be/4I9MbIrlEUw. ■

About the Author

Jennifer Nieto is President of RJ Card Processing Inc. (d/b/a Best Card), CDA's endorsed credit card processor. She is a former CPA and Director of Finance for the Colorado Dental Association, as well as a former FDIC Bank Examiner.

2nd Annual Feed the Foundation Event Heats up a Cool Night!

By Amy Boymel, MDDF Executive Director

The rain and snow on an April evening did not keep more than 100 people from coming out to support the Metro Denver Dental Foundation at its second annual Feed the Foundation (FTF) event. A sell-out crowd gathered for an evening of celebrating which included a wine and hors d'ouevres reception, a three-course meal, the premiere of MDDF's first video and the presentation of the MDDF Award of Excellence to Dr. Michael Poulos.

An amazing turnout at the Chinook Tavern for the 2nd Annual Feed the Foundation Event

Dr. Charles Danna, Dr. Nicholas Chiovitti, Ms. Elizabeth Price and Ms. Sue Swanson

Despite the chilly temperatures, the atmosphere at Chinook Tavern was one of warmth as friends and colleagues enjoyed themselves. MDDF Board President Dr. Nelle Barr kicked things off by expressing appreciation to the committee who planned the event: MDDF Board Members Dr. Nicole Furuta, Ms. Judy Holmes, Ms. Andrea Levine, Dr. Nick Poulos, Ms. Brandy Whalen and MDDF Executive Director, Ms. Amy Boymel. She also thanked FTF Event Sponsors: Presenting Sponsor, Denver Metro OMS and Drs. Kevin Patterson, Juliana Di Pasquale and Michael Cosby; Beverage Sponsor, COPIC Financial Services and Sue Swanson and Andrea Levine; and Video Sponsor, Children's Dentistry, including her practice's partners Drs. Sean Whalen and Betty Barr, for their generous support.

Dr. Nick Poulos spoke about his father's accomplishments and commitments to both the field of dentistry and the general community. He also talked about how fortunate he is to have such an inspiring role model as he presented the 2015 MDDF Award of Excellence to his father, Dr. Michael Poulos, a former president of both MDDF and MDDS.

MDDF Award of Excellence recipient Dr. Michael Poulos, MDDF President Dr. Nelle Barr and Executive Director Ms. Amy Boymel

The program concluded with the screening of a video MDDF produced that is a very personal look at one of the hundreds of survivors of domestic abuse that has been helped by the Smile Again program. Shaina came to MDDF as a scared, insecure 18-year-old, and she is now a confident wife and mother. She was dependent on others as she worked to put her life back together and regain her lost self-esteem. Now she smiles with pride and a real sense of accomplishment when she talks about the family and career she has created. This moving, true story was a fitting end to an evening celebrating how the volunteer MDDS member dentists and MDDF work together to support those in need in our community.

Falling snow didn't prevent guests from indulging in delicious desserts before heading home. Many thanks to all who came, had fun and supported MDDF. We hope to see you next year – and bring your friends!

Have you seen it?

By Amy Boymel, MDDF Executive Director

MDDF has produced their very first video, and we hope you'll check it out at **mddf.org**. Shaina's Story is a very personal look at one of the hundreds of survivors of domestic abuse that has been helped by the Smile Again program. Shaina came to MDDF as a scared, insecure 18 year old, and she is now a confident wife and mother. She was dependent on others as she worked to to put her life back together and regain her lost self-esteem. Now she smiles with pride and a sense of accomplishment when she talks about the family and career she has created. The video is well worth five minutes of your time; her smile is priceless. ■

Smile Again

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ANTIBIOTIC PROPHYLAXIS... ...A MOVING TARGET

By Donald Falace, DMD

It is increasingly common to encounter patients in the dental practice with various medical problems that potentially can increase the risk of providing dental treatment and which may require modifications to the delivery of dental care. Often, treatment guidelines or recommendations published by various medical specialty organizations can help oral health providers make those decisions. In some cases, guidelines or recommendations are evidence-based and logical, making decision making relatively easy. However, in some cases, guidelines may be illogical and/or unsupported by scientific evidence, which can complicate clinical decision making. One such case is the practice of providing antibiotic prophylaxis prior to certain dental procedures, especially for patients with valvular heart disease or for those with total joint prostheses.

American Heart Association Recommendations

Antibiotic prophylaxis was first recommended in 1955 by the American Heart Association in an effort to prevent infective endocarditis (IE).[1] The recommendations were based on the assumption that bacteremias resulting from dental treatment were a significant cause of IE, and that the administration of antibiotics prior to an invasive dental procedure in a susceptible patient would prevent the development of IE. These assumptions were originally based largely on anecdotal observation and expert opinion. Based on these assumptions, the recommendations became the standard of care. There have been nine subsequent sets of recommendations. Over the years, the recommendations varied significantly in the identification of cardiac risk conditions, identification of risk dental procedures, selection of antibiotics, timing of the administration of antibiotics, as well as the route of administration of the antibiotics. The current recommendations were published in 2007.[2]

The administration of prophylactic antibiotics prior to invasive dental treatment likely to result in bleeding for at-risk patients to prevent IE has been the standard of care for more than half a century. There are several facts, however, that question the continuation of this practice. There are no prospective, randomized, controlled trials that have ever been conducted to prove the effectiveness of administering prophylactic antibiotics to prevent IE. Furthermore, it is unlikely that such a clinical trial will ever be conducted due to the logistics of such an undertaking as well as medicolegal issues. While some studies have shown that antibiotic prophylaxis decreases the incidence and/or magnitude of post-treatment bacteremia, there is no evidence that decreasing the incidence or magnitude of bacteremia decreases the incidence of IE. Also, there are several cases that have been reported in which antibiotic prophylaxis was provided but apparently failed to prevent IE.[3, 4] In addition, it has been shown that bacteremias can occur in the absence of visible bleeding.[5] It should also be noted that physiologic bacteremias potentially can occur many times a day with normal activities such as brushing and flossing the teeth and with chewing and is especially likely in patients with poor oral hygiene. These physiologically occurring bacteremias are of similar magnitude and duration as those that occur secondary to dental treatment.[6-8] Therefore, it seems illogical to administer prophylactic antibiotics prior to dental appointments once or twice a year and not prior to those bacteremia-inducing activities that occur multiple times daily. This would obviously be impractical. There are also risks in the administration of antibiotics such as the development of microbial resistance and the development of allergy that may exceed any perceived benefit from prophylactic therapy.

Although it has long been presumed that dentally induced bacteremias are a significant factor in the genesis of IE, case controlled studies both in the Netherlands and the United States have demonstrated that dental treatment does not appear to be a risk factor for developing IE.[4, 9, 10] A French study further concluded that only about 2.6% of cases of IE occur annually in patients undergoing unprotected dental procedures and that even if prophylaxis was 100% effective, it would only prevent a very small number of cases.[11] It has thus been concluded that the majority of cases of IE caused by oral microflora most likely result from random bacteremias caused by routine daily activities.[2]

In recognition of these inconsistencies, national and international professional bodies modified their recommendations. In 2007, the American Heart Association citing the lack of evidence for effectiveness of antibiotic prophylaxis revised its recommendations.[2] Although it would seem logical to no longer recommend antibiotic prophylaxis, the committee concluded that "although there is limited evidence for the effectiveness of antibiotic prophylaxis, it could not rule out the possibility that an extremely small number of cases of IE might be prevented." Therefore, antibiotic prophylaxis continued to be recommended, but only for a very limited group of at-risk patients for whom the outcome of IE would be most serious. It further recommended antibiotic prophylaxis in these at-risk patients for all dental procedures that involved the manipulation of gingival or periapical tissues, or the perforation of the oral mucosa. This was certainly a departure from past recommendations with far fewer at-risk

(Continued on pg. 18)

(Continued from pg. 16)

patients being recommended for prophylaxis.

In 2008, the National Institute for Health and Clinical Excellence (NICE), which is the governing body for the National Health Service in Great Britain, took a courageous stand and published revised guidelines that completely eliminated the recommendation for prophylactic antibiotics prior to dental treatment for any at-risk patient for IE.[12] This was a logical step in view of the evidence and a total departure from the then current standards.

As might be imagined, there was significant controversy over both the AHA and NICE revisions, considering the fact that they contradicted the conventional wisdom in place for so many years. Many cardiologists questioned the reduction or elimination of prophylactic antibiotics expressing the fear that the incidence of IE would increase as would the mortality rate. Recently, however, evidence has been published to the contrary. In 2011, Thornhill, et al[13] published an article describing the impact of the 2008 NICE guidelines. They found no significant increase in either the incidence or mortality rate in IE in the three years since their publication. Furthermore, in 2012, DeSimone, et al[14] reported that there has been no significant increase in IE in Olmstead County in Minnesota (where the Mayo Clinic is located) since publication of the 2007 AHA recommendations. While these publications support the reduction in or elimination of antibiotic prophylaxis, further long-term studies will be required to definitively resolve the issue. However, in the opinion of the author, it is likely that the next set of recommendations from the AHA will be the same as the NICE recommendations.

American Academy of Orthopedic Surgeons (AAOS)

For many years, orthopedic surgeons have recommended that patients with total joint prostheses receive antibiotic prophylaxis prior to dental treatment to decrease the risk of hematogenous infection of the prosthesis. This recommendation was made on the assumption that dental treatment was a significant cause of late total joint infections and was based on case reports, a few animal studies, and anecdotal information. In spite of the lack of scientific evidence, the practice became the de facto standard of care. There was, however, a lack of consistency in terms of the physicians' choice of antibiotic as well as the timing of administration and dose. In addition, it was not clear what type of dental treatment required prophylaxis, but most often it was for procedures likely to cause bleeding. Frequently, the recommendation was the same as the AHA recommendation for the prevention of IE, in spite of significant differences between the pathophysiologic processes.

In 1997, with an update in 2003, the issue was addressed by publication of a statement of recommendations made by a joint committee of the AAOS and the American Dental Association (ADA).[15, 16] The statement concluded that scientific evidence does not support the need for antibiotic prophylaxis for dental procedures to prevent late prosthetic joint infections. Furthermore, it is not indicated for patients with pins, plates and screws, nor is it indicated for most patients with total joint replacement. However, there were several types of patients who were at increased risk of infection from any source, and who were recommended to receive antibiotic prophylaxis prior to dental treatment likely to cause bleeding. It should be noted that there was no evidence that even these patients were at risk for infection secondary to dental treatment.

Even though these recommendations were jointly agreed upon and published, many orthopedic surgeons still routinely directed that all patients with a total joint prosthesis receive antibiotic prophylaxis for invasive dental procedures likely to cause bleeding and most dentists complied with this mandate. Then in 2009 the AAOS, without consultation with the ADA, unilaterally published an "information statement" that suggested that all patients with a total joint prosthesis receive antibiotics for any dental procedure likely to result in a bacteremia, reflecting the opinion of many of their membership. Thus, an already confusing and frustrating issue became even more confusing leaving the oral health care professional wondering what the correct medicolegal procedure was to follow.

Fortunately, some recent evidence has emerged which will help clarify the issue. In 2010, Berbar[17] published a case-control study of 678 prosthetic joint patients from the Mayo Clinic looking at patients with prosthetic joint infections with varying exposure to dental treatment and concluded that dental procedures were not risk factors for subsequent total hip or knee infection, nor did the use of antibiotic prophylaxis prior to dental procedures decrease the risk of subsequent total hip or knee infection. In addition, Skaar, et al[18] came to a similar conclusion after reviewing date of 1,000 Medicare patients with a total joint prosthesis and prosthetic joint infections over a ten year time period, stating that dental procedures were not associated significantly with subsequent risk for prosthetic joint infections.

In light of this emerging evidence, late in 2010, the AAOS, ADA, and the Infectious Disease Society of America convened a committee to develop evidence-based recommendations for the dental management of patients with total joint prosthesis. It was estimated that it would take at least a year to develop these new guidelines. The profession is eagerly awaiting the outcome of this endeavor. In the meantime, the most prudent approach for the oral health practitioner would seem to be to follow the 1997/2003 guidelines. ■

About the Author

Dr. Donald Falace is Professor Emeritus at the University of Kentucky College of Dentistry. He served as Professor and Chief of the Division of Oral Diagnosis, Oral Medicine and Oral Radiology for thirty-five years. He maintains a limited private practice devoted to the treatment of snoring and obstructive sleep apnea.

1. Jones T, Baumgartner L, Bellows M, Breese B, Kuttner A, McCarty M, et al. Prevention of rheumatic fever and bacterial endocarditis through control of streptococcal infections. Circulation 1955;11:317-20.
2. Wilson W, Taubert KA, Gewitz M, Lockhart PB, Baddour LM, Levison M, et al. Prevention of infective endocarditis: guidelines from the American Heart Association: a guideline from the American Heart Association Rheumatic Fever, Endocarditis and Kawasaki Disease Committee, Council on Cardiovascular Disease in the Young, and the Council on Clinical Cardiology, Council on Cardiovascular Surgery and Anesthesia, and the Quality of Care and Outcomes Research Interdisciplinary Working Group. J Am Dent Assoc 2007;138(6):739-45, 47-60.
3. Durack DT, Kaplan EL, Bisno AL. Apparent failures of endocarditis prophylaxis. Analysis of 52 cases submitted to a national registry. Jama 1983;250(17):2318-22.
4. Van der Meer JT, Van Wijk W, Thompson J, Vandenbroucke JP, Valkenburg HA, Michel MF. Efficacy of antibiotic prophylaxis for prevention of native-valve endocarditis. Lancet 1992;339(8786):135-9.
5. Roberts GJ. Dentists are innocent! "Everyday" bacteremia is the real culprit: a review and assessment of the evidence that dental surgical procedures are a principal cause of bacterial endocarditis in children. Pediatr Cardiol 1999;20(5):317-25.
6. Roberts GJ, Jaffray EC, Spratt DA, Petrie A, Greville C, Wilson M, et al. Duration, prevalence and intensity of bacteraemia after dental extractions in children. Heart 2006;92(9):1274-7.
7. Durack DT, Beeson PB. Experimental bacterial endocarditis. II. Survival of a bacteria in endocardial vegetations. Br J Exp Pathol 1972;53(1):50-3.
8. Lucas VS, Lytra V, Hassan T, Tatham H, Wilson M, Roberts GJ. Comparison of lysis filtration and an automated blood culture system (BACTEC) for detection, quantification, and identification of odontogenic bacteremia in children. J Clin Microbiol 2002;40(9):3416-20.
9. van der Meer JT, Thompson J, Valkenburg HA, Michel MF. Epidemiology of bacterial endocarditis in The Netherlands. II. Antecedent procedures and use of prophylaxis. Arch Intern Med 1992;152(9):1869-73.
10. Strom BL, Abrutyn E, Berlin JA, Kinman JL, Feldman RS, Stolley PD, et al. Dental and cardiac risk factors for infective endocarditis. A population-based, case-control study. Ann Intern Med 1998;129(10):761-9.
11. Duval X, Alla F, Hoen B, Danielou F, Larrieu S, Delahaye F, et al. Estimated risk of endocarditis in adults with predisposing cardiac conditions undergoing dental procedures with or without antibiotic prophylaxis. Clin Infect Dis 2006;42(12):e102-7.
12. Richey R, Wray D, Stokes T. Prophylaxis against infective endocarditis: summary of NICE guidance. Bmj 2008;336(7647):770-1.
13. Thornhill MH, Dayer MJ, Forde JM, Corey GR, Chu VH, Couper DJ, et al. Impact of the NICE guideline recommending cessation of antibiotic prophylaxis for prevention of infective endocarditis: before and after study. Bmj 2011;342:d2392.rea ddditis prevention guidelines. Circulation 2012;126(1):60-4.
15. Advisory statement. Antibiotic prophylaxis for dental patients with total joint replacements. American Dental Association; American Academy of Orthopaedic Surgeons. J Am Dent Assoc 1997;128(7):1004-8.
16. Antibiotic prophylaxis for dental patients with total joint replacements. J Am Dent Assoc 2003;134(7):895-9.
17. Berbari EF, Osmon DR, Carr A, Hanssen AD, Baddour LM, Greene D, et al. Dental procedures as risk factors for prosthetic hip or knee infection: a hospital-based prospective case-control study. Clin Infect Dis 2010;50(1):8-16.
18. Skaar DD, O'Connor H, Hodges JS, Michalowicz BS. Dental procedures and subsequent prosthetic joint infections: findings from the Medicare Current Beneficiary Survey. J Am Dent Assoc 2011;142(12):1343-51.

THE DRIFTER

By Dave Andrus, CDT

Have you ever felt the thrill of victory after dismissing a patient with a perfect crown on an upper second molar that had an impossibly deep proximal margin? The x-ray confirmed the margins were perfect, the floss confirmed the proximal contact was perfect, the marks from the articulating ribbon confirmed the occlusion was perfect, and the patient confirmed everything felt great –"thanks doc" and out the door they went happy as could be. Ever feel the agony of defeat and wonder why that same patient is now sitting in your operatory complaining that they are packing food in the "perfect" proximal contact of that "perfect" upper second molar crown?

While I don't know of a cure for drifting teeth, I can offer a remedy.

The Drifter crown is a full gold or full contour zirconia restoration designed with an open proximal box with extensive mechanical retention which is filled with composite at the cementation appointment. If future movement occurs, the composite can be removed and replaced like a class II filling, closing the contact without having to replace the crown.

The composite can be removed and replaced as many times as necessary.

The Drifter crown can be designed to be case, site, patient and doctor specific. We use full cast gold and full contour zirconia crowns because they are next to bullet proof and are suitable for just about any situation that arises. The proximal box is designed with proprietary retentive contours to ensure the composite will not come out without being removed by a dentist. Gold and zirconium materials offer a benefit in that they provide a clean release of remnant pieces of composite after the bulk of material has been removed in the event that the proximal contact opens and the composite needs to be replaced. ■

Full cast gold Drifter crown. Full gold crowns and full contour zirconia crowns are used in this application because of their superior durability. Often there is not enough proximal space or strength with other types of crowns.

Full contour translucent zirconia crown (we call T-Zir) with a proximal box which will be filled with composite at the cementation appointment. The box is designed with retentive contours to retain the composite filling.

Full contour translucent zirconia crown (T-Zir) with the proximal box filled with composite in the dental office ready to be cemented.

Full contour translucent zirconia crown with the mechanically retentive distal box filled with composite. If the second molar drifts distally, the composite can be removed to re-establish the proximal contact without replacing the crown. In this case, the second molar drifted distally but the first molar needed a crown, so the Drifter crown was prescribed for the first molar with a retentive distal box.

About the Author

Dave Andrus, CDT has been a dental technician for 37 years with a diverse background in the dental industry. He has served on the board of the National Association of Dental Laboratories and is a past president of the Colorado Dental Laboratory Association. He has worked in research and development and has been a technical director and instructor/lecturer for numerous porcelain and alloy companies. He has studied numerous occlusal theories, has been course instructor and laboratory facilitator for the International Partnership for the Study of Occlusion (IPSO), has lectured nationally and internationally and been widely published in dental technology and dental publications.

Dave has owned Diamond Dental Studio for 29 years. He can be reached at (303)-822-6666, (866)431-5111, andruscompanies@netecin.net, Facebook Dave Andrus or Diamond Dental Studio.

PEER REVIEW: WHAT IS IT AND HOW DOES IT BENEFIT ME?

By Brandon Hall, DDS, Editor

You open up that envelope on your desk with a return address of a patient. Or it's an email your front desk team member forwards to you. Your stomach drops and your heart rate skyrockets. It's a complaint from a patient. We've all had it in some way, shape or form. However, before you freak out, there's a great way to have these situations mediated outside of any legal court proceedings. It's called "Peer Review." Most of us have heard the term but I don't think everyone knows how beneficial it is as a member of organized dentistry here within MDDS and CDA.

Hopefully you can address these complaints before they get to the level of a legal avenue but if you can't, here's how peer review can help. Let's first go through what peer review is and how it begins. Taken directly from the CDA website (www.cdaonline.org):

"Peer review is not a court and has no disciplinary function. It provides an alternative dispute resolution mechanism, at no cost to either party. Peer Review is a process by which the dental profession reviews and attempts to resolve dental treatment problems and misunderstandings through mediation.

Regardless of the circumstance it is the committee's responsibility to act as a middleman in helping to resolve the dispute. During mediation we do not see records, radiographs, charts or anything relative to the case. We act as strictly an intermediary.

The Council on Peer Review and local committees consist of CDA member dentists who volunteer their time and talents to review and assist patients. Unbiased, objective and timely reviews are conducted using the Colorado Dental Association's format for addressing disputes between patients and dental care providers."

As the CDA points out, some dental complaints do not apply for peer review. They are essentially for the "quality of care and the appropriateness of treatment." Therefore, do not expect all complaints to be accepted by the Committee. Dr. Doug Heller, a periodontist in Aurora and chair of the MDDS Peer Review Committee gives insight on the process:

"Initially what we call a 'mediation' begins. A patient makes a complaint asking for some type of resolution. The dentist can agree to the resolution, disagree or offer an alternative to the proposal. It is my experience that at this point cases fall into two distinct areas. The first occurs when there is a breakdown in communication with the dentist or dental office and the second involves money. Financial disputes tend to involve payments that have been made or a desire for monies to be returned due to some form of dissatisfaction. Surprisingly, many of these cases originate from the proverbial 'poor chairside manner.' These types of cases can involve the patient's complaint of poor quality as well.

Regardless of the circumstance, it is the Committee's responsibility to act as a middleman in helping to resolve the dispute. During mediation we do not see records, radiographs, charts or anything relative to the case. We act as strictly an intermediary. It is designed to be a non-judgmental process in regards to both the patient and the dentist. The goal is to find resolution whereby both sides are comfortably satisfied. This may involve many attempts in a back and forth process between the patient and the dentist until a middle ground is agreed upon. As I had mentioned, some of these cases stem from a breakdown in the communicative process. If the mediation is unsuccessful, meaning that one or both of the parties is unwilling to agree to a resolution, then the complaint can go to arbitration. At this stage, a committee of three dentists evaluates all records from participating dentists and may even examine the patient. This is a binding process and judgment is made as to the nature of the complaint. If, for example, it is an ill-fitting crown then that will be determined based on films, statements from both parties and examination if applicable. A binding judgment is then determined.

The Committee meets on a case-determined basis, and I am happy to say over the course of the last year we have not had to meet too frequently. The purpose of keeping complaints out of the judicial system remains a significant benefit to the patient and to the member dentist in equal measure. Hopefully, Peer Review will continue to be the best benefit you haven't heard about."

While it is not the ultimate solution for all patient complaints, Peer Review is a great option for a patient to utilize where both parties can come to an amicable agreement. If your patient decides that Peer Review is not the option for them or the complaint falls out of the criteria for Peer Review, then it is always advised that you seek out legal counsel immediately and prepare for legal proceedings.

You can review the Peer Review Details at www.cdaonline.org/public/about-the-cda/file-a-complaint. ■

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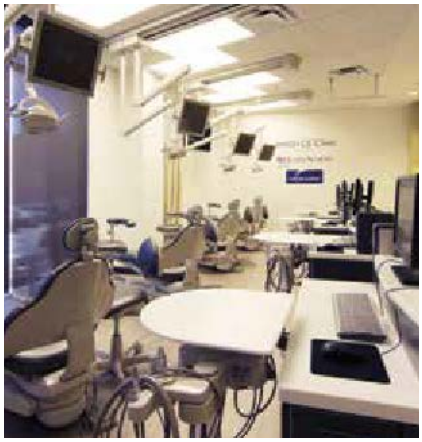

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EVENT CALENDAR

JUNE 2015

June 26-27
Nitrous Oxide/Oxygen Administration Training
Mountain West Dental Institute
925 Lincoln Street, Unit B
Denver, CO 80203
8:00am - 5:00pm Friday
8:00am - 12:00pm Saturday
(303) 488-9700

AUGUST 2015

August 14-15
Colorado Mission of Mercy
485 N Cottonwood Ave,
Cañon City, CO 81212
All Day
(720) 415-4636

SEPTEMBER 2015

Spetember 11
Molars Golf Tournament
1414 Castle Pines Parkway,
Castle Rock, Colorado 80108
9:00am - 3:00pm
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NOVEMBER 2015

Novemver 5-10
ADA 2015 – America's Dental Meeting
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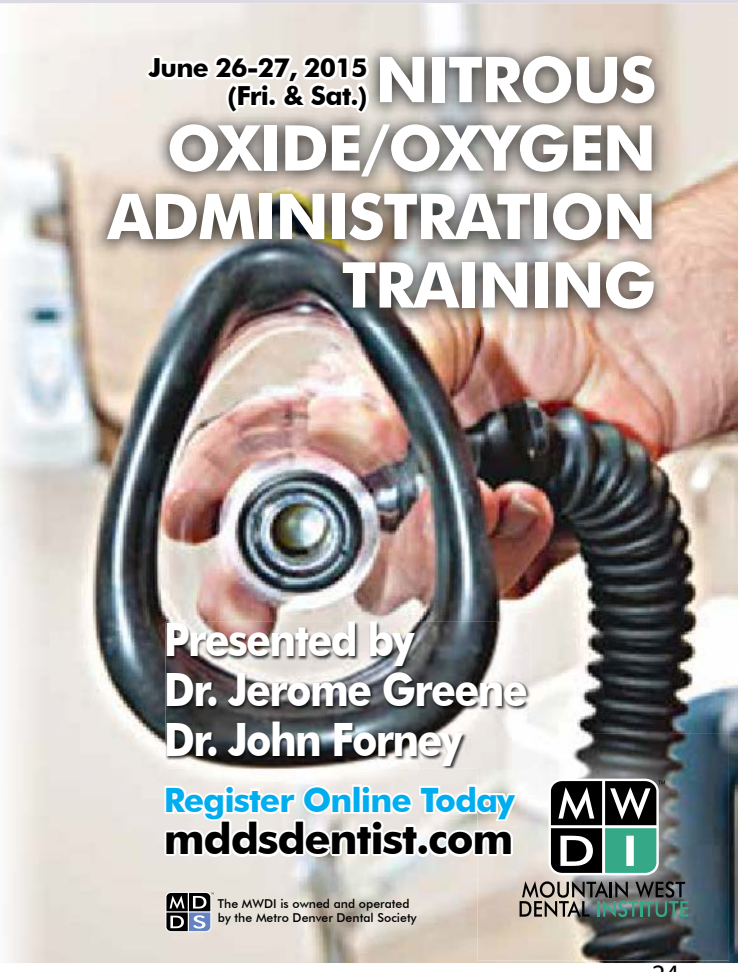
www. ada.org/en/meeting

DECEMBER 2015

December 4-5
Nitrous/Oxide Oxygen Administration Training
– Dr. Jerome Greene & Dr. John Forney
Mountain West Dental Institute
925 Lincoln Street, Unit B
Denver, CO 80203
8:00am - 5:00pm Friday
8:00am - 12:00pm Saturday
(303) 488-9700



GLOBAL DENTAL RELIEF: Colorado dentists working in volunteer teams to bring top-notch care to children around the world

By Kerri Shwayder Greenberg & Will Mateo

Every year since 2001, dedicated and compassionate dentists have joined Denver based non-profit Global Dental Relief (GDR) to bring top-notch dental care to children around the world. Four MDDS members epitomize the compassionate, hardworking and intrepid individuals who come together from around the world in teams of dental and nonmedical volunteers to provide care to underserved children in Cambodia, Guatemala, India, Kenya and Nepal.

Drs. Peter Vanicek, Liliane Brantes, Lynda Berman and Anil Nutakki have each traveled thousands of miles to work in week-long dental clinics in impoverished communities. Their efforts give children who would otherwise go without access to a dentist the gift of a healthy smile and the tools and knowledge to maintain a healthy mouth. In the process, these committed volunteers receive a priceless gift of their own. Traveling on a GDR trip to Guatemala in 2011 as a fourth year dental student, Dr. Anil Nutakki shared that, "it was enriching to experience a new culture, travel to a new place and feel truly appreciated for the services I provided. It was also an opportunity to form lasting bonds with a number of dental school classmates and create memories that will last a lifetime."

Dr. Peter Vanicek and Dr. Lilane Brantes with GDR in Cambodia, February 2015

During their time together in Guatemala with GDR, Dr. Nutakki and several of his classmates decided to make trips with GDR a semi-regular event. Now with several years under their belts as practicing dentists, Dr. Nutakki and two of his dental school classmates recently returned from a second trip with Global Dental Relief – this time to Kenya. Each of GDR's locations and partnerships reflects the unique characteristics of that particular community. While clinics in Guatemala are set up field-style with portable dental units in a local town hall in the Mayan Highlands, the Kenya clinic is a modern dental operatory with Aidec chairs located in the Kikuyu Medical compound just outside of Nairobi.

MDDS member and local dentist, Dr. Lynda Berman has also volunteered with GDR in both Guatemala and Kenya. Dr. Berman set off on her first trip to Guatemala in May of 2009 with her then 16-year-old daughter. A fabulous mother-daughter adventure, Dr. Berman remembers it as a "great experience for her daughter as she learned more about what her mother does while engaging with the children, sterilizing instruments and practicing her Spanish." When GDR invited former volunteers to participate in the 2013 inaugural trip to Kenya, she was one of the first to sign up – this time bringing her beloved dental hygienist to volunteer in the clinic as well. Asked what inspires her to volunteer, Dr. Berman replies that, "volunteerism is a part of professionalism and a privilege that brings intense personal satisfaction."

One of the many wonderful features of the GDR volunteer experience is that it attracts a diverse group of people from a wide variety of professional backgrounds and different stages in their careers. Dr. Peter Vanicek and his wife and fellow dentist, Dr. Liliane Brantes, have found that "volunteering and traveling with Global Dental Relief has been a most enjoyable way to transition into retirement." Dr. Vanicek and Brantes took their first volunteer trip with GDR to India after 30 years in private practice together, and have been "hooked" ever since volunteering in Guatemala, Nepal and most recently Cambodia.

Dr. Vanicek, who has also become a GDR trip leader and volunteers his time in the Denver office to coordinate the ordering and delivery of supplies to GDR's five international locations, describes the experience with great passion: "It is such a privilege to be a guest in a local community for a period of time instead of just a traveler passing through. We have the opportunity to learn from each other, share a smile, laugh or hug and further a little global understanding. We often see a child, even after a difficult appointment, return to the clinic the next day with a new understanding about dentistry, ready and willing to receive treatment with a smile. Our fellow volunteers are such interesting people with varied backgrounds and experiences. They all share a love of giving. And the opportunity to explore the host country and partake in local sites together after a week of hard work is a perfect finale to the meticulously planned experience. It's impossible not to make new friends and have a new perspective in our lives after a volunteer experience with GDR."

To join fellow dentists Drs. Nutakki, Berman, Vanicek and Brantes and the over 1,500 dental and nonmedical volunteers combined who have made a real difference in the lives of children, visit the Global Dental Relief website www.globaldentalrelief.org for detailed information. ■

About the Authors

Building upon a career in public policy and philanthropy, Kerri Breenberg joined the GDR Denver team in 2012 as Associate Director / Strategic Planning. She has volunteered and led numerous GDR dental clinics in Vietnam, Guatemala, Kenya and Cambodia.

Will Mateo - is a recent graduate of the University of Denver's Korbel Graduate School of International Studies. Will joined the GDR Denver office as a Country Coordinator in 2014. He will participate in his second GDR clinic this summer in Guatemala.

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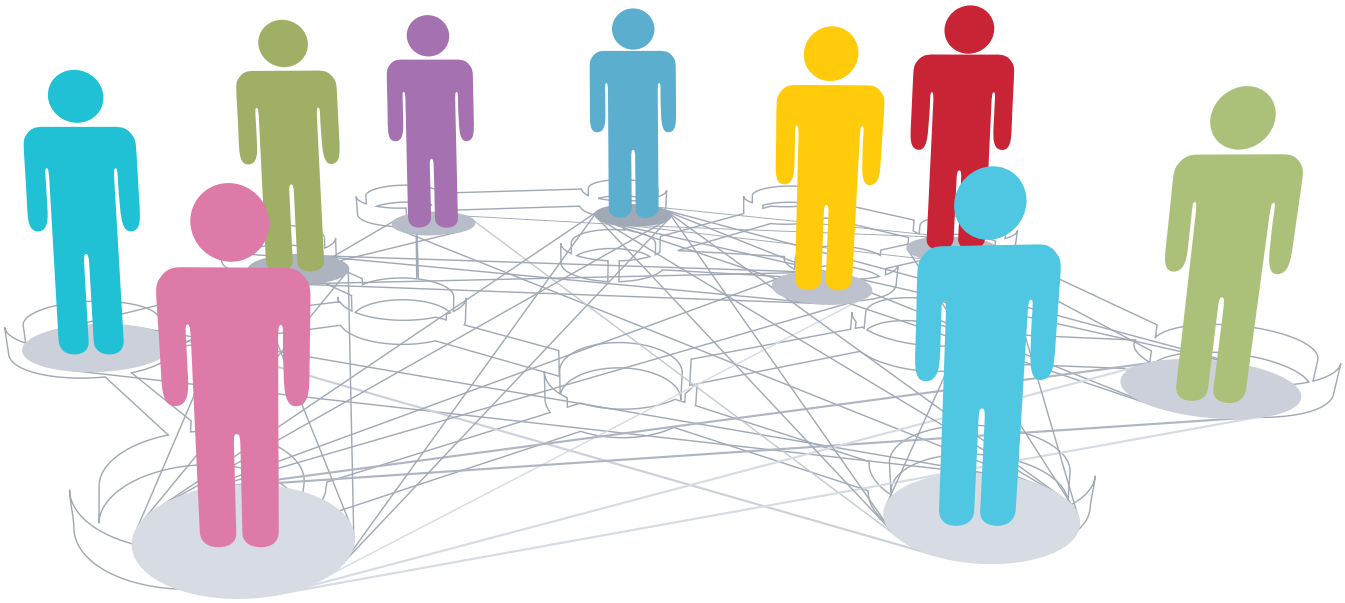

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My differential diagnosis would include a dentigerous cyst, ameloblastic fibroma, and odontogenic keratocyst with all the other possibilities unlikely based on this radiolucent lesion surrounding the crowns of two impacted teeth. However, a number of lesions that eventually calcify begin as radiolucencies. An ameloblastic fibro-odontoma is associated with impacted teeth and is associated with patients of this age.

1. A DENTIGEROUS CYST is the most likely (my choice) since this is a radiolucent lesion associated with two impacted teeth and appears to surround the crowns. It could even be an eruption dentigerous cyst. However, involving two teeth that erupt at different times is unlikely.

2. An ODONTOGENIC KERATOCYST could have this appearance and may occur especially in an individual with the Nevoid Basal Cell Carcinoma Syndrome. This is the age where the odontogenic keratocysts start to occur in the syndrome. This is an autosomal dominant syndrome. The peak age range of odontogenic keratocysts is 10-40 with a slight male predilection. The location is typically the posterior mandible (over 60%).

3. AMELOBLASTOMAS are extremely uncommon in individuals under 20 and typically occur in the mandible (80% or more). There was no expansion in the case which is typical of an ameloblastoma. The radiographic findings appearing radiolucent cannot exclude an ameloblastoma, but with the age of 13, without symptoms, and the posterior maxilla location, it is unlikely.

4. An ODONTOGENIC MYXOMA is an uncommon odontogenic tumor with an average age of the mid-twenties. It is radiolucent and usually multilocular with "tennis racket" architecture, showing septations intersecting at ninety degrees. Clinically they are indistinguishable from ameloblastomas. The age of the patient, absence of symptoms and location make this an unlikely diagnosis.

5. Seventy percent of CENTRAL GIANT CELL GRANULOMAS normally occur in the mandible, anterior to the molars. They present as both unilocular and multilocular radiolucent lesions and may be expansile. There is a wide age range and this case is a possibility. They are not typically associated with impacted teeth. This lesion is a possibility for this case but I still feel unlikely due to the location and association with impacted teeth.

6. The AMELOBLASTIC FIBROMA typically presents as a radiolucent lesion of the posterior mandible in the first two decades of life. It can be associated with impacted teeth and also be multilocular. I think this one is a possibility.

7. The ADENOMATOID ODONTOGENIC TUMOR typically occurs in this age group and has a strong tendency to be found in the anterior portion of the jaws. The maxilla is twice as common as the mandible and the tumor can be associated with an impacted tooth. They seldom exceed 3 cm and have a female predilection. The radiographic appearance is typically mixed radiolucent/radiopaque with snowflake calcifications. However, early lesions may appear as radiolucent. This lesion must be excluded by biopsy. The location argues against this diagnosis.

8. The CALCIFYING ODONTOGENIC CYST (Gorlin cyst), as the name implies, would normally have calcifications. This lesion is typically diagnosed in the second and third decades. A large number are associated with odontomas, especially in younger ages. Studies show that 13-30% of COCs are extraosseous and 65% are found in the incisor/canine region. Lesions typically start as a radiolucency before becoming radiopaque. This is a possibility but unlikely.

9. The CALCIFYING EPITHELIAL ODONTOGENIC TUMOR (Pindborg tumor) is an uncommon lesion that has a wide age range and found in many parts of the jaw. It is most often encountered between 30 and 50 in the posterior mandible. This lesion usually presents as a painless, slow growth lesion that begins as a radiolucent process (unilocular or multilocular). The tumor is frequently associated with impacted teeth and calcifications are found throughout the tumor.

10. The AMELOBLASTIC FIBRO-ODONTOMA is found in young people (average age 10) in the posterior mandible. They are asymptomatic and discovered on routine radiographs. They typically present as a radiolucent lesions with varied calcifications and are associated with unerupted teeth.

The histologic findings were a surprise with Figure 2 showing sheets of polyhedral epithelial cells with prominent eosinophilic cytoplasm, intercellular bridges and a few scattered concentric calcifications. This lesion was a CALCIFYING EPITHELIAL ODONTOGENIC TUMOR (Pindborg tumor). This again teaches me that "lesions do not read textbooks" and "the patient is a case of one." Figure 3 shows a one year follow-up radiograph with normal appearance.

This case was submitted by Dr. John Truitt, an oral surgeon practicing in Richmond, VA. ■

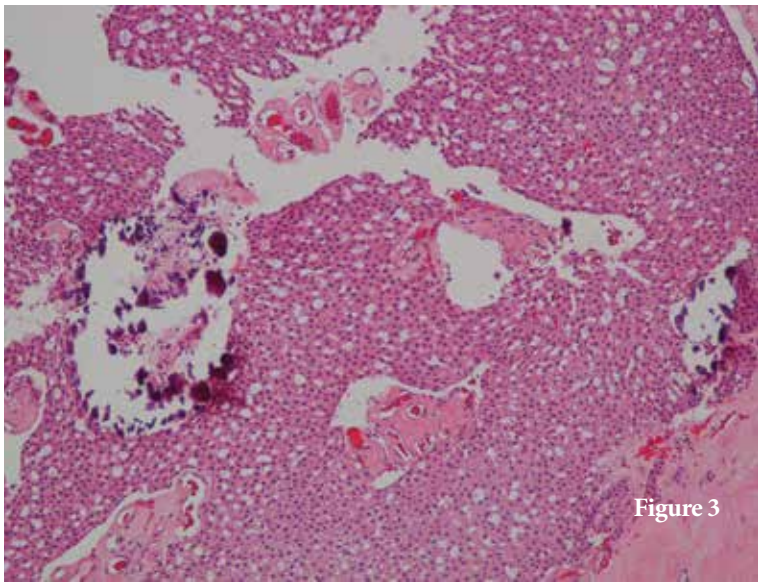
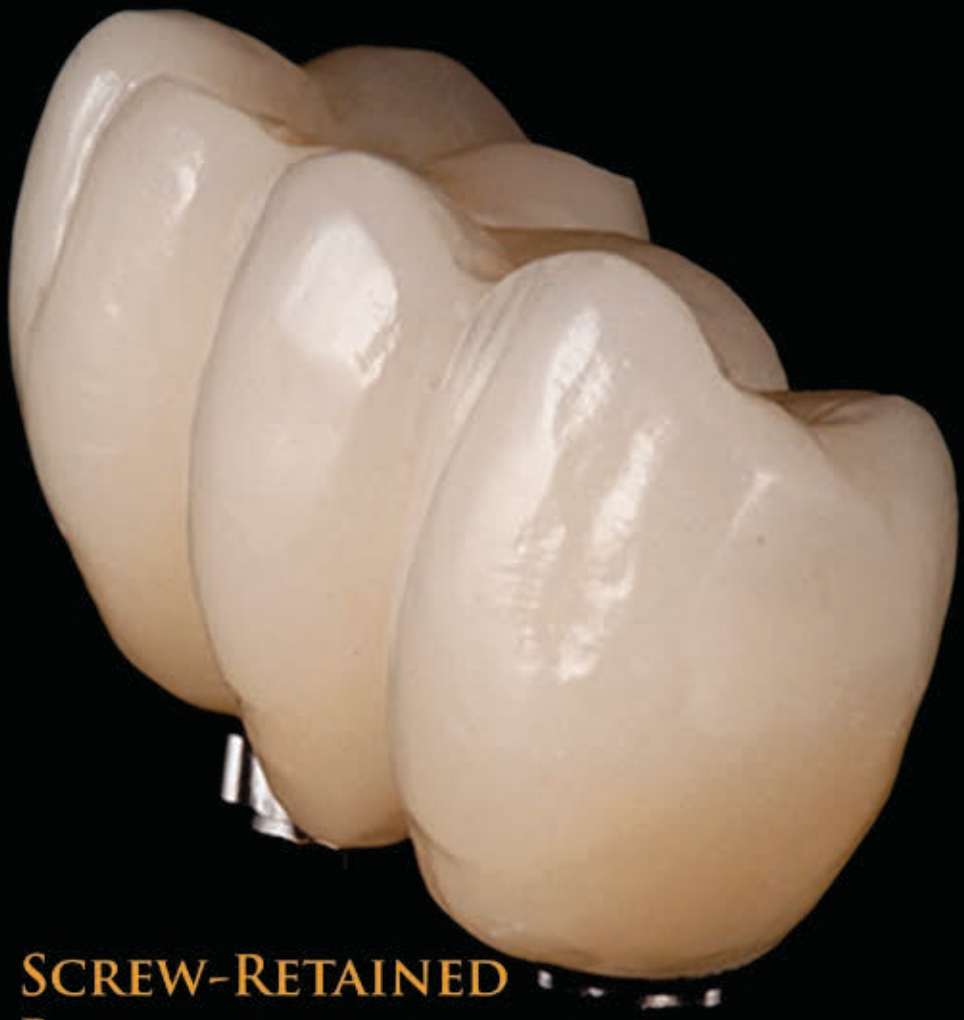


Figure 3

Zirconia Screw-Retained Restorations



Screw-Retained Bridges

Screw-Retained Singles

Ideal Custom Design, No Cement
Durable, Beautiful, Flat Fee

pda

PDA Dental Laboratory

303.494.2118

Job Board

Front Desk Staff: Answering phones, making appts, filing insurance with Eaglesoft, statements and billing via Eaglesoft. Visit mddsdentist.com/classifieds and locate this ad to apply.

Kids In Need of Dentistry – KIND: One of the oldest dental nonprofits is currently looking for a dentist for our Denver Clinics. If you are dentist with pediatric experience who has a passion for treating underserved children with high quality comprehensive dental care, please inquire about our position. This position requires you to be sensitive to low income, ethnic minority communities. We are seeking someone with excellent leadership skills and the ability to motivate and appreciate a great staff. Bilingual is a plus. Please contact Julie Collett, RDH, Executive Director about this rewarding position at 303-733-3710 x111.

Real Estate

ADS Precise practices for sale: Colorado & Wyoming including Denver, Boulder, Cheyenne, Cody, Casper, Westminster, Arvada, Englewood, Aurora, Lakewood, Littleton, Parker, Greenwood Village, Ft. Collins, Colorado Springs & South, Mountains and Western Slope. For detailed information on practices for sale visit www.adsprecise.com or call Jed Esposito MBA, CVA or Peter Mirabito DDS, FAGD at 888-886-6790. We specialize in Practice Sales, Practice Appraisals, and Partnerships.

General Practices for Sale with CTC Associates: Practice listings along the Front Range in Denver, Arvada, Lakewood, Littleton, Castle Rock, Colorado Springs, and Fort Collins. Additional opportunities available in Montrose and throughout the eastern mountains. We also have opportunities in New Mexico, Utah, Idaho, Wyoming and Hawaii. For a summary of each current practice opportunity, go to www.ctc-associates.com or call Larry Chatterley and Susannah Hazelrigg at (303)795-8800.

Office Space for Lease at MDDS Headquarters!: Looking for office space to rent in Denver? The Metro Denver Dental Society has a 100 square foot office available. Contact Jill Kingen, Facilities & Events Manager, at (303) 488-9700 ext. 3274 or events@mddsdentist.com.

Ortho Practice for Sale with CTC Associates: New, beautiful, high tech, spacious Orthodontic practice for sale in Colorado Springs. This practice offers private consultation room, large imaging room, 5 operatories, digital imaging and paperless charts, with plenty of room to expand. Contact Marie Chatterley with CTC Associates at (303)249-0611 or marie@ctc-associates.com.

Announcements & Services

Transition Services with CTC Associates: For more information on how to sell your practice or bring in an associate, or for information on buying a practice or associating before a buy-in or buy-out please contact Larry Chatterley and Susannah Hazelrigg at (303)795-8800 or visit our website for practice transition information and current practice opportunities www.ctc-associates.com.

Visit mddsdentist.com/classifieds to place an ad.