FLORIDA FOCUS

March, 2022

the publication exclusively for the general practitioner

FLORIDA
ACADEMY of
GENERAL DENTISTRY

Dr. Naresh Kalra presents the FLAGD Humanitarian Award to Dr. Boris Bujila.

FLORIDA FOCUS

FLORIDA FOCUS Copyright: 2022©FLAGD - Florida Academy of General Dentistry: 5721 NW 84th Terr., Gainesville, Florida, 32653- Millie Tannen, DDS, MAGD, Editor, Patricia Jenkins, Managing Editor. Send announcements and correspondence to: Florida Academy of General Dentistry: 5721 NW 84th Terr., Gainesville, Florida, 32653 Phone: 866-620-0773, FAX: 352-354-9064. Email: Flagdinfo@gmail.com Send letters to the editor to: Millie Tannen, DDS, MAGD, FLAGDEDITOR@GMAIL.COM Disclaimer: The Florida Academy of General Dentistry, its Officers and Board of Directors does not necessarily endorse opinions or statements contained in essays or editorials published in the Florida Focus. The publication in advertisements does not indicate endorsements for use of products or services. The Florida Focus is published for its members by the Florida Academy of General Dentistry. Comments and suggestions about the Florida Focus should be sent to the Executive Office: Patricia Jenkins, Executive Director: 5721 NW 84th Terr., Gainesville, Florida, 32653

2022-2023 OFFICERS AND DIRECTORS AT-LARGE

OFFICERS

PRESIDENT
Matthew Scarpitti, DDS

VICE PRESIDENT
Toni-Anne Gordon, DMD

SECRETARY
Ray Morse, DMD, MAGD

EDITOR
Millie Tannen, DDS, MAGD

TREASURER
Harvey P. Gordon, DDS, MAGD

IMMEDIATE PAST-PRESIDENT
Naresh Kalra, BDS, DDS

DIRECTORS AT-LARGE
Tara Fenn, DMD
John V. Gammichia, DMD, FAGD, Public Information Officer
Toni-Anne Gordon, DMD, Membership
Douglas Massingill, DDS, MAGD
Mark C. Behm, DMD, CE Chair
Niblado Morales, DDS
Bipin Sheth, DDS, MAGD

REGION 20 OFFICERS

REGION 20 DIRECTOR
Aldo Miranda-Collazo, DMD

REGION 20 TRUSTEE
Andrew Martin, DMD, MAGD

REGION 20 SECRETARY/TREASURER
Harvey P. Gordon, DDS, MAGD

How to Reach Us

Florida Academy of General Dentistry
5721 NW 84th Terr., Gainesville,
Florida, 32653
Phone: 866-620-0773
Email: Flagdinfo@gmail.com

EXECUTIVE DIRECTOR
Patricia "Tri" Jenkins

President's Message

I am overwhelmed with gratitude to have been selected as the new President of the Florida Academy of General Dentistry. I'd like to thank our current President Dr. Naresh Kalra and Immediate Past President Dr. Andrew Martin for all of their dedicated hard work and guidance over the past two years. They are truly an inspiration for me as I take on this new role. I would also like to thank Ms. Patricia Jenkins, Executive Director of the Florida AGD, for all of her support and commitment to this organization of the past five years. Her support has been tremendously valuable. In addition, I would like to thank the executive board for their unwavering commitment to the Florida AGD. Lastly, and most importantly, I would like to thank our membership for their support in trusting me to take on this position.

Our role as a board is to represent our membership as a value-added organization. As you all know, the AGD is the only organization with the sole interest of representing and advocating for the general dentist. Continuing education is crucial to our profession and the patients we treat on a daily basis. It is through this organization that we as dentists separate ourselves with a commitment to lifelong learning via our Fellowship and Masterhip programs. Our charge is to you, the member, to find and provide quality educational programs to facilitate our growth as an organization as well as representing our profession on many differant levels legislatively. We are here to act as your voice, to make sure our members are heard.

We are at a critical point as an organization to maintain the health of the AGD and FLAGD for our current and future members. Membership is vital to our future success. If you have not done so already, I encourage all of you to become involved at some level in your local components. We are an organization led by members, and we need future leaders to step up and continue to advocate for our profession. It is through volunteering that I find the most fulfillment as an oral healthcare professional, not only for our patients but also our colleagues through organizations like the AGD and FLAGD.

I am humbled to be your president and look forward to working with this exceptional group of doctors over the next year. I am passionate about peer to peer support in bettering our profession and continuing to offer our patients the most excellent care through ongoing education. I will do everything within my power to ensure we are well represented as an organization. Together we can continue to grow and develop the Florida division of the AGD.

Stay safe and be well!

Dr. Matthew Scarpitti

Editor's Note

The first time I spotted oral cancer in one of my patients was unforgettable. It was the classic red lesion on the lateral border of the tongue of a middle-aged man. Thankfully, Wayne received immediate and excellent treatment and was able to enjoy his life for many more years!

This April, we will once again observe Oral Cancer Awareness Month. Although COVID is still the focus of much of our public health concerns, it is literally vital that we continue to inform our patients about oral cancer and that we continue performing oral cancer exams for every patient. To quote the AGD website, "Approximately 54,000 Americans are expected to be diagnosed with oral or oropharyngeal cancer this year. It is expected to cause more than 10,800 deaths this year alone, according to Cancer.org." According to the Oral Cancer Foundation, "**132** new people in the US **EVERY DAY** will be newly diagnosed with oral cancer, and that one person **EVERY HOUR OF THE DAY, 24/7/365** will **die** from it."

The AGD has a wealth of information on oral cancer detection, including courses such as "HPV, The Underestimated Cause of Oral Cancer" and the two-part "Clinical Oral Pathology" and videos on "Performing an Oral Cancer Screening." In addition, the Oral Cancer Foundation has excellent recommendations on how to conduct an oral cancer screening event in your office or elsewhere in your community at https://oralcancerfoundation.org/events/oral-head-neck-cancer-awareness-month/ Please use these resources to refresh your knowledge and to make your patients aware of this life-saving service you perform during every oral exam.

We hope you enjoy and benefit from this issue of the *Florida Focus*! Please complete the exercises on pages 18-19 to earn 2 hours of free CE, and please contact your editor at flagdeditor@gmail.com with your comments and recommendations!

Wishing you a happy, healthy, and successful Spring!

Millie K. Tannen, DDS, MAGD

2022 FLAGD Installation of officers. From left: Drs. Nibaldo Morales, Mark Behm, Millie Tannen, Toni-Anne Gordon, Douglas Massingill, John Gammichia, Ray Morse, Harvey Gordon, and Naresh Kalra. Unable to attend: Drs. Matthew Scarpitti and Tara Fenn.

Congratulations to the 2022 FLAGD Officers and Award Winners!

Dr. Boris Bujila accepts the Humanitarian Award from Dr. Naresh Kalra.

Dr. Naresh Kalra presents the Distinguished Service Award to Dr. Andrew Martin.

At the University of Florida, Dr. Tony Menendez presented the James Frank Collins Lifetime Achievement Award to Dr. James Haddix and the Award for Most CE Hours to Dr. Richard Heinl.

Meet Dr. Toni-Anne Gordon, FLAGD Vice-President and Membership Chair

What experiences attracted you to dentistry as your career, Dr. Gordon?

Many moons ago, what attracted me was that my dentist, back home in Jamaica, restored my cousin's confidence after an accident that she had. We were playing. She had a tooth avulsion, and she just totally lost her confidence.

It was a permanent tooth. She wouldn't smile; she wouldn't talk. We were about 8 years old, so this was pretty significant, to lose your front tooth.

He replaced it with a partial denture. I didn't know for years it was a partial denture. I thought it was magic, like her tooth came back.

Every time I went to the dentist after that, I was looking to see what he was doing. I liked the ability that someone could significantly impact someone's smile, someone's attitude, to restore confidence like that. My cousin was a very vivacious person, so to see her just lose it all and then gain it back, just by a simple act of the replacement of a smile, that really impacted me and started my journey into dentistry.

At 8 years old, that's fantastic! What a great story! What aspects of dentistry appeal to you now?

The same thing: when your patient truly sees himself in a different way, that they probably hadn't seen in many years or had just really lost confidence. With this pandemic, people have kind of lost themselves staying at home, forgetting to brush their teeth, or sometimes not having been to the dentist in two years, because they were afraid to come in.

Even starting by just doing prophies or doing simple composites to enhance their smile, to see that confidence resume, reminds me of what I'm doing and why I started loving dentistry in the first place, because it's really hard right now, even though everything is picking back up. You know there are still patients out there that are slowly coming back in, and they're trying to get their confidence back, to get back in the workforce and to get their lives going.

Was there anybody who encouraged you to join the AGD, or were there any special programs of the AGD that appealed to you?

I started my journey with the AGD at the University of Florida College of Dentistry. We had a student chapter, and they had Lunch and Learns. I was curious. Anytime they had any Lunch and Learns, I would go, and I was just really intrigued.

I think there was one where they had a visiting faculty member come from MUSC [Medical University of South Carolina]. I was learning so much and eventually, I did go to MUSC to their dental school for my residency. When I was there, the door said that it was funded by the South Carolina AGD. It was remarkable to see how the AGD can influence students.

So here I am today, just from going into a Lunch and Learn at the University of Florida. It was a great opportunity.

As the membership chair and VP, are you promoting Lunch and Learns with students?

We've been trying to promote more engagement with the student chapters, and we're trying to get more faculty support at some of the schools. We have a strong membership at the University of Florida, and with the help of Dr. Stephen Howard, it's been going really well. Having been the membership chair for some time now, my focus is to retain members, but to also engage the students, because some of the students don't know if they want to go into perio or another specialty, but for those that want to continue in general dentistry, the world is open to them. They can do aspects of perio in in their own practices, and we have courses to encourage them. The FLAGD hosted some perio courses recently to help the general dentist. So, my focus is to engage students to continue to fall in love with dentistry and not to think that it's just filling and drilling, but to continue evolving. Being an AGD member is continuous learning and involvement, hopefully to get your Fellowship and your Mastership.

One thing I experienced when I was in residency was leaping from a class of eighty-something students to a residency with five residents. Then, when you get to an office, it might be you and the next dentist, and in some offices, you're the only dentist. We have a profession and an organization that gets general dentists together, to encourage those younger dentists to keep with organized dentistry and to reach out, because you can find a mentor within that circle. Just going to your local component dinner meetings or just reaching out, you can find support; and it doesn't feel as lonely anymore when you have a group that's there with you and encourages you to keep moving forward in the profession.

"I was learning so much and eventually, I did go to MUSC to their dental school for my residency. When I was there, the door said that it was funded by the South Carolina AGD. It was remarkable to see how the AGD can influence students."

Are the students finding mentors among members of the FLAGD?

I think there needs to be more of that, and I know the AGD has implemented mentorship. I think that that has enticed some of the younger members, because it's hard to find mentorship, to see somebody who can guide you along. Maybe there's a seasoned member or someone who is just 10 years into their career, and they want someone to bounce ideas off and to freshen up. I think having members join forces will definitely help the organization to grow.

Do you have any specific plans in 2022-23 for membership programs?

We just had our live CE in Jacksonville, and the goal with the CE chair is to continue to host live CEs. We're still doing our free quarterly webinars. Dentists' Day on the Hill is a part of advocacy for the general dentist, and also the AGD scientific session this year will be in Orlando. We're encouraging Florida dentists and students to come out to really ramp up the love for the profession, the Florida AGD, and for AGD in general.

Do you know if the students are planning to attend from the three Florida dental schools?

That would be a great goal, and that's something that we will have to organize. The students are still in school in summertime, but we can get them ahead of the game, to know that this is something that they really should be attending, especially if they're in student chapters. Students often don't realize that they can gain CE toward their Fellowship, even as a student. It's great networking, too, as a young dentist, to meet dentists from all over, coming to Florida for this event.

What is your practice like?

I work for a Federally Qualified Health Center, a community health setting. Our organization in Central Florida is the region's largest not-for-profit provider of health care and wellness services. In the center, it's not only dental. We have medical, a pharmacy, and a multitude of things to serve the community. I can speak to the patient's pediatrician or I can speak to their medical primary care doctor to get the whole entire health of the person that I'm treating in the right direction.

Do you have any advice or other message for Florida AGD members?

Just continue to come out, now that the local components are trying to get back to the feeling of being together. Just go to component meetings, because they sometimes involve free CE's and dinner. It's not even about the CE and the dinner; it's just the camaraderie of meeting fellow dentists in your local area and getting involved.

I didn't even think that I would be in this position today. I was running late. I had patients, but I had signed up for this dental meeting, and I would have felt bad if I didn't show up.

By the time I got there, everybody was already eating dinner. I sat down, and the person I sat beside was Merlin Ohmer. Merlin struck up a conversation with me, asking what dental school I went to, where did I work. Lo and behold, Merlin was calling my office a couple of weeks later, asking, "Hey, would you like to get involved in the Florida AGD?"

The next thing I knew, I took the offer of being involved with the Florida AGD. You never know where leadership will take you, but I'm glad that I decided to go that evening. Just being on the board and seeing what could be done to help other younger dentists, and to get some ideas going of how to invigorate the AGD itself, because this is a great organization, and it's been here for 70 years.

If I have any advice, it's to stay with organized dentistry. I was talking to my co-worker, and I said to her, "Hey, are you a member of the AGD?"

She said, "Well, I'm not sure."

Then, she signed up, and she's like, "I could have been using all these CE's all this time to gain my Fellowship?"

Now she's turning her wheels to get her CE's to earn her Fellowship. Looking at her, I can see the goal is there for her to further her journey into dentistry. It was just like Merlin did for me. It was one simple conversation of helping somebody get on the track of getting a goal in mind.

It's a wonderful thing as a dentist to be a Fellow, and if you had a question about what would be a goal of mine, the goal would be to finally get my Fellowship with the AGD and eventually the Mastership.

An Update on Antibiotic Use and Infection Management in Dentistry

by Dr. Jonathan Spenn

Introduction

"In those days, Israel had no king; everyone did as they saw fit" (Judges 17:6). Perhaps no better description could be given to the current state of antibiotic use in our profession. In May of 2019, the Journal of the American Medical Association released an article stating that 81% of prophylactic antibiotic prescriptions written by dentists were unnecessary.[1]

Later that same year, the American Dental Association (ADA) published a landmark article entitled "Evidence-Based Clinical Practice Guideline On Antibiotic Use For The Urgent Management Of Pulpal- And Periapical-Related Dental Pain And Intraoral Swelling."[2] While this may have been the first time the ADA published this information as "guidelines," there was nothing new about this information. Groups like the American Association of Endodontists had been saying these same ideas for years.

This article recorded the following results: "With likely negligible benefits and potentially large harms, the panel recommended against using antibiotics in most clinical scenarios, irrespective of DCDT availability"[2] (DCDT stands for Definitive, Conservative Dental Treatment). The conclusion and practical implications were as follows: "The expert panel suggests that antibiotics for target conditions be used only when systemic involvement is present and that immediate DCDT should be prioritized in all cases."[2] Guidelines are only as good as the extent to which they are followed. Sadly, while these guidelines have existed for over two years, they are often either unknown or simply not followed.

Categories Of Antibiotic Uses

Antibiotic uses are broken down into two main categories: Prophylactic and Therapeutic.[3] Within the prophylactic category, we have two sub-categories: primary and secondary. Primary prophylactic antibiotics are used when there is concern for post-treatment infection at the surgical site. Given that the mouth is such a forgiving environment and the relative non-invasiveness of most general dentistry procedures, primary prophylactic antibiotics are seldom warranted.

"For the dentist doing routine oral surgery, this means that most office procedures performed on healthy patients do not require prophylactically administered antibiotics. The incidence of infection after tooth extraction, frenectomy, biopsy, minor alveoloplasty, and torus reduction is extremely low; therefore, antibiotics would provide no benefit. This is true even in the presence of periapical infection, severe periodontitis, and multiple extractions."[4]

AHA Prophylaxis

Secondary prophylactic antibiotics are used when there is concern of post-treatment infection at a distant site. The most common indication for antibiotic prophylaxis (AP) is for patients with underlying cardiac conditions in whom there is concern for developing infective endocarditis (IE). The American Heart Association (AHA) updated its guidelines in 2021.[5]

As these guidelines continue to be published over the years, the cardiac conditions warranting pre-treatment prophylaxis have become less and less. For example, several years ago, a condition like mitral valve prolapse with regurgitation was recommended for AP. Now, the list of conditions has become limited to four situations: prosthetic cardiac valve or material, previous relapse or recurrent IE, coronary heart disease, and cardiac transplant recipients who develop cardiac valvulopathy (Table 1).

These four conditions have not changed since the last iteration of the AHA guidelines released in 2017. What did change from 2017 to 2021 was that Clindamycin is no longer recommended for AP in patients who are allergic to penicillin. Clindamycin was removed due to the FDA black box warning for its implication in Clostridium Difficile infections (Table 2).

Doxycycline was added to the list as an alternative to Clindamycin. Goodchild & Donaldson have raised some legitimate concerns about doxycycline as a replacement for Clindamycin due its questionable efficacy for preventing IE.[6] Regardless, azithromycin stands as a valid replacement for those allergic to penicillin.

Another item for consideration is how few people who report a penicillin allergy actually are allergic to penicillin. "In the United

Table 1. AP for a Dental Procedure: Underlying Conditions for Which AP Is Suggested.

Prosthetic cardiac valve or material
Presence of cardiac prosthetic valve
Transcatheter implantation of prosthetic valves
Cardiac valve repair with devices, including annuloplasty, rings, or clips
Left ventricular assist devices or implantable heart
Previous, relapse, or recurrent IE
CHD
Unrepaired cyanotic congenital CHD, including palliative shunts and conduits.
Completely repaired congenital heart defect with prosthetic material or device, whether placed by surgery or by transcatheter during the first 6 mo after the procedure
Repaired CHD with residual defects at the site of or adjacent to the site of a prosthetic patch or prosthetic device
Surgical or transcatheter pulmonary artery valve or conduit placement such as Melody valve and Contegra conduit
Cardiac transplant recipients who develop cardiac valvulopathy

Table 2. Antibiotic Regimens for a Dental Procedure Regimen: Single Dose 30 to 60 Minutes Before Procedure.

Situation	Agent	Adults	Children
Oral	Amoxicillin	2 g	50 mg/kg
Unable to take oral medication	Ampicillin OR	2 g IM or IV	50 mg/kg IM or IV
	Cefazolin or ceftriaxone	1 g IM or IV	50 mg/kg IM or IV
Allergic to penicillin or ampicillin—oral	Cephalexin* OR	2 g	50 mg/kg
	Azithromycin or clarithromycin OR	500 mg	15 mg/kg
	Doxycycline	100 mg	<45 kg, 2.2 mg/kg >45 kg, 100 mg
Allergic to penicillin or ampicillin and unable to take oral medication	Cefazolin or ceftriaxone†	1 g IM or IV	50 mg/kg IM or IV

Clindamycin is no longer recommended for antibiotic prophylaxis for a dental procedure.
IM indicates intramuscular; and IV, intravenous.
* Or other firstor second-generation oral cephalosporin in equivalent adult or pediatric dosing. † Cephalosporins should not be used in an individual with a history of anaphylaxis, angioedema, or urticarial with penicillin or ampicillin.

States, an estimated 8% of the population has had an allergic reaction to penicillin. However, only 10% to 20% of patients with a reported antimicrobial allergy have allergy test positive results." [3] Given these statistics, it means that only 0.8-1.6% of the U.S. population have a true penicillin allergy.

Even in patients with cardiac conditions warranting AP, they must be undergoing a dental procedure invasive enough to warrant prophylaxis. The AHA indicates that AP is recommended for "All dental procedures that involve manipulation of gingival tissue or the periapical region of teeth or perforation of the oral mucosa."[5]

Due to this statement being somewhat vague, they give a clarifier of what procedures do not warrant AP (even in those patients with one of the four cardiac conditions listed above): "Anesthetic injections through noninfected tissue, taking dental radiographs, placement of removable prosthodontic or orthodontic appliances, adjustment of orthodontic appliances, placement of orthodontic brackets, shedding of primary teeth, and bleeding from trauma to the lips or oral mucosa." [5]

Prosthetic Joints

Historically, secondary prophylactic antibiotics have been prescribed to prevent prosthetic joint infection. However, this practice has not been recommended since 2015 when the ADA/American Association of Orthopaedic Surgeons (AAOS) established a recommendation stating that prophylactic antibiotics were no longer warranted for dental patients who have prosthetic joints (regardless of how long ago the prosthetic joint was placed).[7] Sadly, many physicians and even dentists are still prescribing antibiotics for prosthetic joints.

Therapeutic Antibiotics

The second main category of antibiotic use is therapeutic. Underneath this category are two subcategories: Primary and adjunctive. There are really no indications for primary therapeutic antibiotics in dentistry as antibiotics are never definitive care. When antibiotics are "therapeutic," this is usually when they are given for a self-limiting condition that was not truly an infection to begin with.

Adjunctive therapeutic antibiotics are for the treatment of a patient who presents with an active infection pre-treatment or someone who develops infection post-treatment. As mentioned above, adjunctive therapeutic antibiotics are only to be used when systemic signs are evident and/or the patient is immunocompromised. Even so, as the name "adjunctive" states, antibiotics are only given as an adjunct to definitive care. Blicher et al provide some clarification as to which conditions do and do not warrant adjunctive antibiotics.[8] These are given from an endodontist's perspective.

Indications For Adjunctive Antibiotics[8]

Acute apical abcess with systemic involvement
Acute apical abcess in medically compromised patients
Replantation of avulsed permanent teeth
Soft tissue trauma requiring suturing or debridement
Rapidly progressive infections (onset within 24 hours), cellulitis, or osteomyelitis

Contraindications for Adjunctive Antibiotics[8]

Irreversible pulpitis
Pain in the absence of other signs/symptoms of infection
Pulpal necrosis
Asymptomatic apical periodontitis
Symptomatic apical periodontitis
Chronic apical abcess (sinus tract)
Acute apical abcess without signs of systemic involvement
Traumatic injuries including fractures and luxation injuries

Hupp et al also give their stance as to situations in which antibiotics are indicated/contraindicated.[4] These are given from an oral surgeon's perspective.

Indications for Therapeutic Use of Antibiotics[4]

Swelling extending beyond the alveolar process
Cellulitis
Trismus
Lymphadenopathy
Temperature higher than 101 F
Severe periocoronitis
Osteomyelitis

Situations in Which the Use of Antibiotics is Not Necessary[4]

Patient demand

Severe pain/ "toothache"

Periapical abcess

Dry socket

Multiple dental extractions in a patient who is not immuno-compromised

Mild pericoronitis (inflammation of the operculum only)

Drained alveolar abcess

Dispelling Myths

Sadly, many myths persist in our profession concerning antibiotics/infection management. These myths often serve as excuses for not offering definitive care in a timely manner. The remainder of this article will serve to address some of these common myths:

Myth #1: Patients who are in pain must be "infected." On the contrary, most patients presenting to an emergency room (ER) or dental office complaining of severe pain are suffering from irreversible pulpitis. This is caused when the pulpal tissue of a tooth is irreversibly inflamed. Common symptoms are radiating pain, lingering sensitivity to cold, sensitivity to hot, or unprovoked/spontaneous pain. Cold testing should be used to clinically duplicate the patient's symptoms.

Sadly, many patients in this situation are given antibiotics. The pain eventually subsides not because of the antibiotic therapy, but because the pulp necroses. However, there is dangerous power in placebo/anecdotal evidence. This is simply the "post hoc, ergo propter hoc" phenomenon ("after this, therefore because of this"). Unfortunately many patients, ER physicians, and even dentists are convinced that the antibiotics "cured" the pain.

Myth #2: For patients presenting with a legitimate infection, antibiotics alone will cause the

infection to subside (without definitive treatment). This common myth is refuted by the oral surgery literature:

"The primary method for treating endodontic infections is to perform surgery to remove the source of the infection and drain the anatomic spaces affected by indurated cellulitis or an abscess. Whenever an abscess or cellulitis is diagnosed, the surgeon must drain it. Failure to do so may result in worsening of the infection and failure of the infection to resolve, even if antibiotics are given. . . . Moreover, when surgery cannot be done immediately, a course of antibiotics does not reliably prevent worsening of the infection." [4]

"Antibiotics do not penetrate biofilms well. Surgical drainage is the most important treatment we can offer. Essentially, the treatment of almost all dental infection is surgical, ranging from excavation of decay and gingival curettage to extraction and incision and drainage." [9]

Myth #3: Local anesthetic injections in the presence of infection can cause the infection to spread. Reader et al address this in their local anesthesia book:

"The traditional belief is that injecting directly into a swelling is contraindicated. The reasons given were the possible spread of infection and that the anesthetic solutions would be affected by the lower pH and would be rendered less effective. However, a basic science investigation found that local anesthetics may be successful in inflamed tissue, which is acidified. Regardless, the basic reasons we do not inject swellings is that it is very painful and relatively ineffective." [10]

"If soft tissue swelling (ie, cellulitis or abscess) is present, infiltrate on either side of the swelling or administer a block." [10]

Myth #4: The presence of true infection makes adequate anesthesia impossible. An article by Bieter from 1936 is often cited as evidence that local anesthesia will not work in an acidic environment. [11] Much has been learned since 1936 and it is probably time to abandon this long- and widely-held belief. Reader et al undermine the long-held "pH Theory" based on more current literature:

"Another explanation relates to the theory that the lowered pH of inflamed tissue reduces the amount of the base form of anesthetic to penetrate the nerve membrane. Consequently, there is less of the ionized form within the nerve to achieve anesthesia. If this mechanism of failure is correct, it may be true for an infiltration injection in the maxilla. It does not explain the mandibular molar with pulpitis that is not readily anesthetized by an IANB injection. The local anesthetic is administered at some distance from the area of inflammation. Therefore, it is difficult to correlate local influences with failure of the IANB. Interestingly, a basic science investigation found that local anesthetics may be successful in inflamed tissue that is acidified." [10]

Myth #5: Anesthetic failure is an indication of infection. Again, this is often a mis-diagnosis. As can be seen on the ADA Nov 2019 algorithm, cold testing is crucial to adequate diagnosis. Anesthetic failure is well-documented in the endodontic literature for lower molars with irreversible pulpitis. This inflammatory phenomenon often gets misdiagnosed as infection.

Anesthetic challenges can happen even in the absence of infection or inflammation. Supplemental anesthesia must always be considered and used when "traditional" regional block/local infiltration modalities fail. PDL injections, Intrapulpal injections, and intraosseous injections (ie, Stabident, X-Tip, etc) are all options that need to be utilized when necessary.

Myth #6: Treatment in the presence of infection will cause the infection to spread. Hupp et al address this myth in their textbook:

"Contrary to widely held opinion, extraction of a tooth in the presence of infection does not promote the spread of infection. Several studies have shown that removal of a tooth in the presence of infection hastens the resolution and minimizes the complications of the infection, such as time out of work, hospitalization, and the need for extraoral I & D." [w]

"Incision of the abscess or cellulitis allows removal of the accumulated pus and bacteria from the underlying tissue. Evacuation of the abscess cavity dramatically decreases the load of bacteria and necrotic debris. Evacuation also reduces the hydrostatic pressure in the region by decompressing tissues, which improves the local blood supply and increases the delivery of host defenses and antibiotics to the infected area. I & D of a cellulitis serves to abort the spread of the infection into deeper anatomic spaces." [4]

Myth #7: Patients with a legitimate infection should be placed on antibiotics for a week before treatment can be done. This myth is based on several false ideas mentioned above: anesthesia will not work in the presence of infection, treatment in the presence of infection will cause for the infection to spread, etc.

"Therefore, prompt removal of the offending tooth (or teeth) in the presence of infection is to be encouraged; a prior period of antibiotic therapy is not necessary" [4]

Myth #8: If an I & D does not produce purulent exudate, it was not helpful. "Incision and drainage of a cellulitis is to be encouraged rather than avoided. Experience has shown that when pus is not encountered during incision and drainage, the patient still gets better." [9]

Myth #9: Antibiotics should be given "just in case" to prevent infection. As antibiotic recommendations/guidelines continue

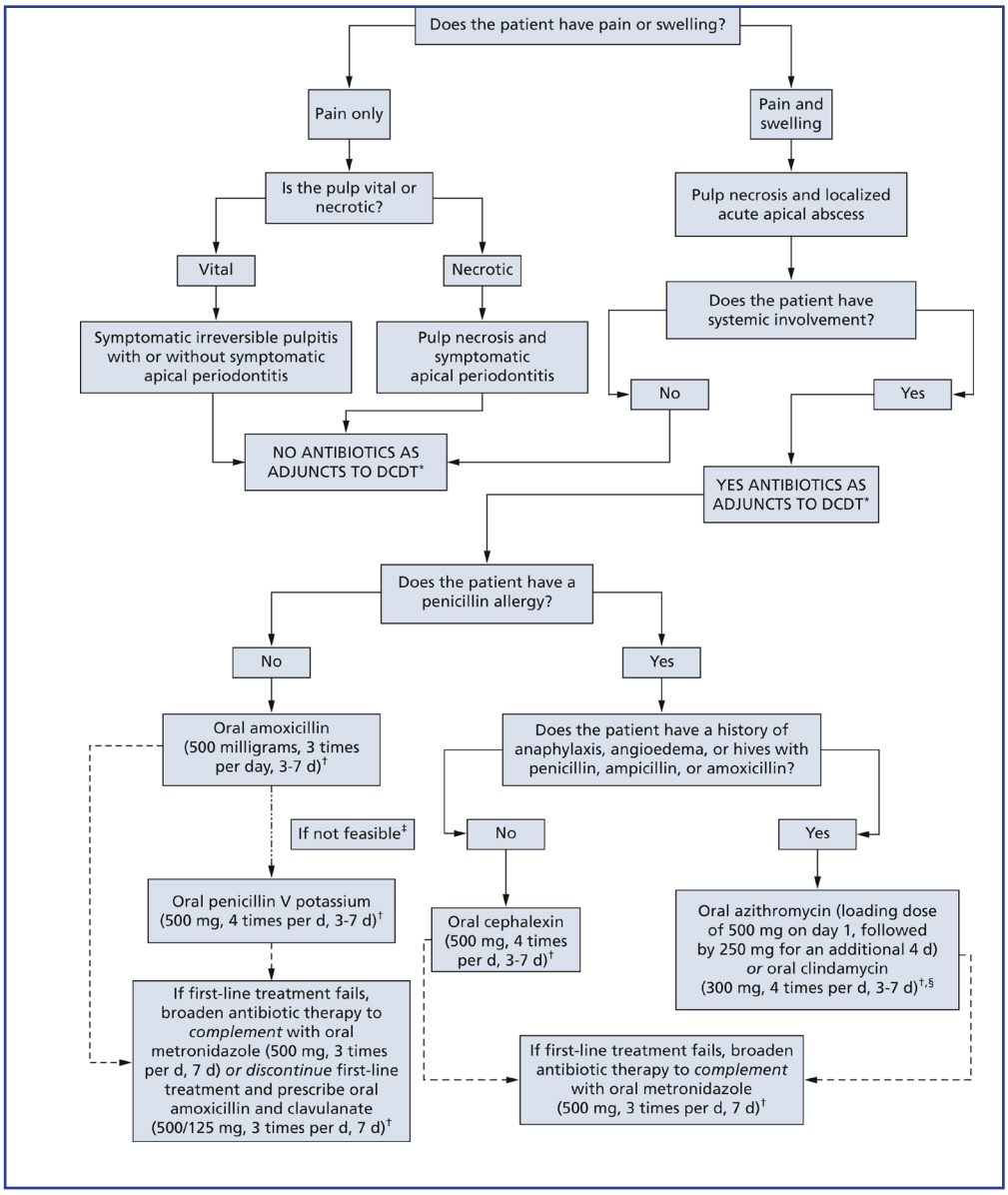
to develop, legitimate indications for antibiotic use in dentistry continue to become less and less. Antibiotic use in dentistry has shifted from "just in case" to "only when necessary."

Myth #10: If the patient's physician wants them to be pre-medicated for procedures that do not warrant prophylaxis according to current recommendations, the dentist is still obligated to prescribe antibiotics. This is where patient education is important. Time must be taken to explain to the patient current antibiotic recommendations. If the patient's physician still wants to prescribe against AHA/AAOS recommendations, then the physician needs to prescribe the antibiotics. Regardless, we still have a responsibility to educate the patient, even if they and their physician choose to disregard current recommendations.

Conclusion

"In accordance with antimicrobial stewardship (AMS) initiatives, part of the responsibility of oral health care professionals is to educate the general public about the significance of antibiotic resistance and the importance of restricting the use of antibiotics in the oral health setting. Patients need to understand that the use of antibiotics is not an acceptable treatment for most oral health-related problems such as a 'toothache' and should be used only in cases of severe infection when systemic involvement is evident." [3]

"Antibiotic resistance is a major public health problem, with dentists being an established focus for AMS. Inappropriate prescribing, prescribing for nonmedical reasons, and use of broad-spectrum agents are some practices in the dental industry that should be addressed. Identifying opportunities for AMS in dentistry should be a priority, with many areas established as appropriate targets, such as awareness raising, providing education for dentists and patients, and tracking antibiotic use." [12]



CE questions are on page 18.

Dr. Jonathan Spenn is a native of Central Illinois. He majored in chemistry at Taylor University and then completed his dental education at the Southern Illinois University School of Dental Medicine, graduating in 2008. From there he went on active duty in the U. S. Army where he completed a one-year AEGD program at Fort Benning, GA. He practiced general dentistry in the Army until 2016 and now practices public health dentistry in central Florida. He is a member of the AGD and was awarded Fellowship status in 2019. He and his wife both work for ITEC, a ministry that does dental training in developing countries. He can be reached at jonathan.spenn@gmail.com.

References

1. Suda et al. "Assessment of the Appropriateness of Antibiotic Prescriptions for Infection Prophylaxis Before Dental Procedures, 2011 to 2015." JAMA Network Open, May 2019.
2. Lockhart et al. "Evidence-Based Clinical Practice Guideline On Antibiotic Use For The Urgent Management Of Pulpal- And Periapical-Related Dental Pain And Intraoral Swelling." JADA, November 2019, p. 906.
3. Stein et al. "The Use and Misuse of Antibiotics in Dentistry: A Scoping Review." JADA, October 2018, p. 880.
4. Hupp, James R et al. Contemporary Oral and Maxillofacial Surgery, Sixth Edition. Mosby, 2014.
5. Wilson et al. "Prevention of Viridians Group Streptococcal Infective Endocarditis." JADA, November 2021.
6. Goodchild, Jason & Donaldson, Mark. "Antibiotic Prophylaxis Guidelines: Is There New Information for 2021?" General Dentistry, November/December 2021.
7. Sollecito et al. "The use of prophylactic antibiotics prior to dental procedures in patients with prosthetic joints." JADA, January 2015.
8. Blicher et al. "Antibiotic Stewardship in the Management of Endodontic Infections." Inside Dentistry, 2018, vol. 14, no. 1.
9. Mehra, Pushkar and Richard D'Innocenzo, eds. Manual of Minor Oral Surgery for the General Dentist, Second Edition. Wiley, 2016.
10. Reader, Al et al. Successful Local Anesthesia for Restorative Dentistry and Endodontics. Quintessence, 2011.
11. Bieter RN: Applied pharmacology of local anesthetics, Am J Surg 34:500-510, 1936.
12. Teoh et al. "Antimicrobial Stewardship In Dental Practice." JADA, August 2020, p. 593.

Back to the Future of Dental Sleep Medicine

by Dr. Gy Yatros

Did you ever watch Back to the Future and wonder what minor changes in your life could have major downstream effects on your future? What if you turn right one day instead of left, or if you said YES instead of NO? Never underestimate even a minor decision because I can assure you that sometimes the future outcomes can turn out to be more real than fiction!

Over 20 years ago something happened in my dental practice that forever changed my life and the lives of thousands of dentists and patients throughout our country. It was a normal day in my restorative practice in Holmes Beach when I went into my hygienist's room for a routine check. Mrs. DiCostanzo was in for her hygiene appointment, and she had what seemed like a benign question. She explained she had been diagnosed with Obstructive Sleep Apnea (OSA) and was struggling with her CPAP. She had a prescription from her physician for a mandibular advancement device and asked if I could make her one. I bet you can guess my answer! Just imagine I had said "No" and watch the images of patients, spouses and dental practices fade from the photograph (You must see the movie to get that).

I am certain if I had gone in a different direction at that crossroad and said "No" that my life and the lives of many others would have been changed forever and not likely for the better! The good news is that I didn't say "No I can't". Instead, I said the three words that changed the course of events for the next 20 years; "Yes I can!"

Of course, there is more to the story than simply saying "Yes I can". You must actually do it! At the time I knew little to nothing about Dental Sleep Medicine (DSM), but we got through it and helped Mrs. Dicostanzo. She is still a patient today and loves to hear the story about how together we chose the new but right path and changed the future of many patients and dental practices for years to come.

20 years ago, there were really very little resources available for dentists wanting to become involved in DSM. In many ways the cards were stacked against us. Sleep testing was limited to sleep labs, medical insurance offered virtually no reimbursement, effective calibration devices were not readily available, DSM education focused on the impacts of OSA with little practical direction, dental devices were archaic, and the standards set by the American Academy of Sleep Medicine (AASM) did not include dental devices as a first, or even second, line of therapy. In addition, public awareness and physician acceptance of DSM were all but non-existent.

Old Remmers HSAT Unit Circa 2004

Fast forward 20 years, and most of these obstacles have been greatly reduced or overcome by the efforts of our DSM pioneers. When teaching dentists new to DSM, I find myself sounding like a grumpy old person when I utter one of my recurring mantras – "You don't know how good you've got it!" Back in the day DSM was very difficult, but with today's advances, systems and resources, saying "Yes I can" is infinitely easier.

Let's discuss the hurdles in DSM and how, in 2022, you don't have to be an DSM Olympian to jump over them! Let's start with what we have called "The day the ground shook for DSM." Well, it really didn't shake nor was it a specific day, but in 2006 the AASM changed their practice parameters as they pertain to dentists treating patients with OSA. For the first time, the AASM Practice Parameters for the Treatment of Snoring and Obstructive Sleep Apnea with Oral Appliances stated the following:

"Oral appliances (OAs) are indicated for use in patients with mild to moderate OSA who prefer them to continuous positive airway pressure (CPAP) therapy, or who do not respond to, are not appropriate candidates for, or who fail treatment attempts with CPAP."

"Oral appliances should be fitted by qualified dental personnel who are trained and experienced in the overall care of oral health, the temporomandibular joint, dental occlusion and associated oral structures."

This significant change by the physicians was a result of multiple studies showing the effectiveness of dental devices in treating OSA. Among other things, this major change in standards opened the door for medical insurance reimbursement and physician collaboration. It was really the beginning of the tipping point for DSM.

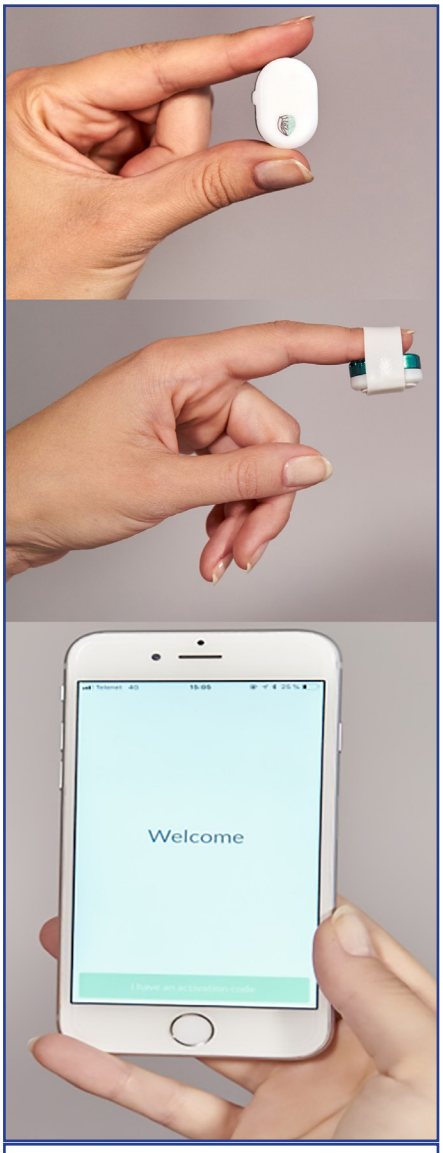
In 2015, the AASM collaborated with the American Academy of Dental Sleep Medicine (AADSM) to update these parameters. In addition to clarifying dentists' roles in DSM, these new parameters provided that dental devices can be considered as a first line of therapy for most OSA patients! As a result of these new standards, the AASM now recommends two first-line therapy options for the esti-

mated 54 million OSA patients in the US – CPAP or Dental Devices. What an opportunity for dentists! Did I mention, "You don't know how good you've got it!"?

That was just the beginning! Shortly after the 2006 AASM Practice Parameters update was released, the AASM made another dramatic change. In 2007, Home Sleep Testing (HST) became an accepted form of diagnosis for OSA patients. Today the common terminology is Home Sleep Apnea Test (HSAT), and this technology has come a LONG way! In-lab Polysomnograms tests (PSG) have given way to HSAT being the primary mode of diagnosis. These tests are accessible, well tolerated, and inexpensive as compared to PSG. In addition, these tests capture a more "normal night" of sleep while recording in the patients' home, as opposed to a more sterile and less sleep conducive PSG lab. These HSAT devices have also become far less expensive and are easily utilized for dental device calibration (also called titration).

So, with that background information, I am going to open the can of worms. One thing that always comes up are the standards or regulations for dentists utilizing HSATs for diagnosis or calibration. Warning! This is a very controversial and unclear subject! The good news is there is some recent clarification on this subject that I will share in a moment.

Let's address the first question. Can dentists utilize HSATs for diagnosis? We must better clarify what that means, but I first want to state, so there is no confusion, that as of today, and likely the foreseeable future, DENTISTS CAN NOT DIAGNOSE OSA! That much is clear.



The HSAT NightOwl

The question is, can a dentist provide a patient with a HSAT unit, gather the data, and then, in a HIPAA compliant way, get that data to a board-certified sleep physician for a diagnosis? Or can a dentist order a HSAT from one of many national companies who will deliver a HSAT to the patient's home, gather the data from the device and have a board-certified sleep physician make a diagnosis? In other words, can a dentist administer or order a HSAT? The answer is, drum roll please, it depends! That is another one of my favorite sayings, but it is applicable in many facets of DSM. The question is what does it depend on? In this case it depends on the dentists' state dental board's position on the subject.

Until recently, we did not know the answer to that question in most states, but now we at least have some guidelines available thanks to the help of the AADSM. First, the AADSM recently published their position on dentists' use of HSAT which includes the following statement:

"It is the position of the American Academy of Dental Sleep Medicine (AADSM) that it is within the scope of practice for a qualified dentist, defined by the American Dental Association (ADA) as a dentist treating sleep-related breathing disorders who continually updates his or her knowledge and training of dental sleep medicine with related continuing education, to order or administer home sleep apnea tests (HSATs). Data from HSATs should be interpreted by a licensed medical provider for initial diagnosis and verification of treatment efficacy."

In 2021, the AADSM sent out a survey to all 50 states' dental boards asking if they have a publicly available position on HSAT usage by dentists. Most states either replied "Yes", allowing the usage of HSAT by dentists, or they had no public position. Only seven states returned replies restricting the use of HSATs by dentists. As of the writing of this article, Florida's dental board had no public position on the subject.

So, what does that mean in Florida? To interpret this can of worms, you will have to use your best judgement. My opinion is dentists should absolutely be able to facilitate, order or use HSATs for calibration. Since the Florida board has not forbidden it, I feel confident in my rationale for utilizing HSATs daily in my practice.

In my practice, the ability to utilize HSATs has streamlined the processes of diagnosis, allowing far better patient access to care especially for my fee for service patients (note there are medical insurance guidelines that should be considered prior to facilitating a HSAT in your dental practice). I have seen that developing a fee for service DSM option, along with utilizing a dental based HSAT procedure, is one of the certain ways to jump start a dental practice into DSM.

Now that the can of worms is opened, let's talk about dental device calibrations with HSATs. You can refer to the same AADSM survey to see individual states' responses to the survey. The ability to assess our patients' device efficacy has never been easier! In the past, our first HSAT units were expensive, slow to interpret, clunky, and would only test for a single night's sleep. Today, there are a wide array of far less expensive HSAT options available. One of the most important features is that these units will test for multiple nights without having to bring the units back into the dental office.

With the availability of this technology, we have developed what I call our "FastTrack Calibration" procedures. I co-authored a short eBook on the subject if you want more details, but in short, we test our patients on multiple nights at multiple mandibular positions to find the ideal "target position" for their mandibular advancement device. Most patients receive this newest disposable HSAT technology as part of their treatment and we can calibrate their dental devices through their smartphone and the cloud. The process of dental device calibration now typically takes a week instead of months. Did I mention that you don't know how good you've got it?

This new HSAT technology provides better patient outcomes as well as helps to facilitate collaboration with physicians. By being able to calibrate our DSM patients' devices more quickly and successfully, we have seen many more physicians become open to DSM. In the past, where the physician doors would close in our faces, they are cracking them open and often welcoming DSM as a viable treatment option for their patients. The lack of predictability of DSM that has prevented physicians from recommending dental devices for their patients has been overcome by this new technology and "FastTrack Technique".

These advances, in combination with the 2015 AASM/AADSM practice parameters as well as the Phillips CPAP recall of 2021, have rapidly advanced our DSM practices in recent years. I am not saying all physicians are on the same page with DSM, but it is certainly a far, far different world than it was 20 years ago!

I think I may have mentioned that today's dentists really have it good! There are many other advances in DSM making it far easier for dentists to provide this procedure in their dental of-

fices. Through digitally milled and printed devices, widely available medical insurance coverage and streamlined DSM EHR systems, the barriers have been tremendously lowered. Today we routinely do virtual consultations, digital scans and, with a click of a few buttons, obtain insurance information and reimbursement for our patients. The devices themselves are digitally mastered, sleek, small and effective. My time requirements per patient have gone from hours to minutes, while providing a superior service that wasn't possible a few years ago. If you ever thought about getting involved in Dental Sleep Medicine, there has never been a better time. Be careful, the next decision you make could influence the next 20 years of your life! I suggest you say, "Yes I can!" and don't erase the future!

CE questions are on page 19.

Dr. Gy Yatros has practiced dental sleep medicine for over twenty years and is a key opinion leader in the field of sleep-disordered breathing and dental sleep medicine. He is the founder of New Concept Sleep which has offices in Bradenton, Sarasota, and Tampa, Florida devoted exclusively to the treatment of sleep disordered breathing. He is co-founder and Senior Advisor for Dental Sleep Solutions, 4 Pillar Billing, Smart Sleep, the North American Dental Sleep Medicine Symposium, and the DS3 System for Dental Sleep Medicine Implementation. He is a Diplomate of the American Board of Dental Sleep Medicine (ABDSM), past president of the Manatee Dental Society, and is an Affiliate Assistant Professor of the Department of Internal Medicine with the University of South Florida, College of Medicine.

References

1. Kushida CA, Morgenthaler TI, Littner MR, Alessi CA, Bailey D, Coleman J Jr, Friedman L, Hirshkowitz M, Kapen S, Kramer M, Lee-Chiong T, Owens J, Pancer JP; American Academy of Sleep. Practice parameters for the treatment of snoring and Obstructive Sleep Apnea with oral appliances: an update for 2005. Sleep. 2006 Feb;29(2):240-3. doi: 10.1093/sleep/29.2.240. PMID: 16494092.

2. Ramar K, Dort LC, Katz SG, Lettieri CJ, Harrod CG, Thomas SM, Chervin RD. Clinical Practice Guideline for the Treatment of Obstructive Sleep Apnea and Snoring with Oral Appliance Therapy: An Update for 2015. J Clin Sleep Med. 2015 Jul 15;11(7):773-827. doi: 10.5664/jcsm.4858. PMID: 26094920; PMCID: PMC4481062.

3. Benjafield AV, Ayas NT, Eastwood PR, Heinzer R, Ip MSM, Morrell MJ, Nunez CM, Patel SR, Penzel T, Pépin JL, Peppard PE, Sinha S, Tufik S, Valentine K, Malhotra A. Estimation of the global prevalence and burden of obstructive sleep apnoea: a literature-based analysis. Lancet Respir Med. 2019 Aug;7(8):687-698. doi: 10.1016/S2213-2600(19)30198-5. Epub 2019 Jul 9. PMID: 31300334; PMCID: PMC7007763.

4. Schwartz, D., Adame, M., Addy, N., Cantwell, M., Hogg, J., Huynh, N., Jacobs, P., Levine, M., Postol, K., & Rohatgi, R. (2020). American Academy of Dental Sleep Medicine position on the scope of practice for dentists ordering or administering home sleep apnea tests. Journal of Dental Sleep Medicine, 7(4). https://doi.org/10.15331/jdsm.7156

5. Home Sleep Apnea Tests - Differences By State. Home sleep apnea tests - American Academy of Dental Sleep Medicine. (n.d.). Retrieved January 21, 2022, from https://aadsm.org/home_sleep_apnea_tests.php

6. Medical device recall notification, sleep and respiratory care devices. Philips. (n.d.). Retrieved January 21, 2022, from ttps://www.usa.philips.com/healthcare/e/sleep/communications/src-update

Patient Safety in Dentistry

Part 2: Documentation

by Sue Boisvert, BSN, MHSA, DFASHRM

Patient Safety Risk Manager,

The Doctors Company Region III

The following article is the second installment in a three-part series on patient safety in dentistry. Part 1, "Patient Communication," appeared in the December issue. Part 3, "Managing Adverse Events," will appear in the next issue.

The relationship between patient safety and documentation may seem remote at first. Patient safety strategies are designed to reduce the risk of adverse events, dental error, and patient harm. Understanding the risks posed by incomplete, inappropriate, or inadequate documentation requires consideration of how a dental record functions. The primary purpose of clinical documentation is to create an orderly chronological record of the clinical decision-making process, treatment provided, and patient responses. Subsequent treating providers rely on the information contained in the record to inform their clinical judgment and treatment. Records that are incomplete or inaccurate may lead to inappropriate treatment and patient harm. Consider the following example.

A 24-year-old female patient was referred to a periodontist by her general dentist. The referral form and dental record both stated that the patient had no known medication allergies (NKDA). Periodontal staff created a medical record for the patient and populated the history and medication fields based on information provided in the records sent by the general dentist's office. On the day of surgery, the periodontist examined the patient and confirmed the finding of a deep pocket requiring surgical intervention. The surgery went well, and the patient left with postoperative instructions and a prescription for antibiotics.

The following day, the periodontal practice learned that the patient had suffered a severe anaphylactic reaction to the antibiotic. The patient had a preexisting allergy to the antibiotic prescribed. She subsequently filed a malpractice complaint against the general dentist and periodontist. Expert witness statements were critical of the general dentist and periodontist for failing to reconcile medications and allergies.

In the example above, the general dental practice sent inaccurate records to the specialist. Staff members at the periodontal practice had preloaded the clinical information provided by the general dentist into their dental record system. The patient did not review the prior history and medication list and was not asked to confirm the information included in the periodontal practice's record.

Claims Analysis and Documentation Requirements

While it is difficult to determine how often poor documentation directly affects patient care, closed malpractice claim analysis provides insights into patient harm events in which documentation may have played a role. The Doctors Company reviewed 1185 dental claims that closed between 2010 and 2020. Documentation issues, the fifth-leading causal factor identified by analysts, appeared in 19 percent of claims. Insufficient documentation was the leading causal factor, followed by content decisions and documentation mechanics. See Table 1 for the top three sources of insufficient documentation. Content decisions generally involved bad decisions that affected defensibility, such as altering the record. Documentation mechanics (process errors) included documenting the wrong chart, transcription errors, and delays. Analysts found a direct correlation between poor documentation and adverse events in 14 claims.

Table 1. Insufficient/Lack of Documentation (n = 172)

Clinical findings	**68**
Informed consent	**55**
Clinical rationale	**51**

Source: The Doctors Company Closed Claims Data. February 2021.

Before delving deeper into insufficient documentation, it is essential to consider what is required. Dentistry is one of the many professions regulated at the state level. Record management requirements are typically defined by statute and further specified in rules. Organizations may also define documentation expectations in policies, procedures, and workflows. Dental professionals should be aware that, during legal and regulatory investigations, courts and professional boards may also consider compliance with policies and procedures. According to Florida Rule 64B5-17.002(1), "the dental record shall contain sufficient information to identify the patient, support the diagnosis, justify the treatment and document the course and results of treatment accurately by including, at a minimum:

- patient histories;
- X-rays;
- examination results;
- test results;
- records of drugs prescribed, dispensed, or administered;
- reports of consultation or referrals; and
- copies of records or reports or other documentation obtained from health care practitioners at the request of the dentist and relied upon by the dentist in determining the appropriate treatment of the patient."

The regulatory list is helpful as a high-level guide and checklist for assessing compliance. From a patient safety perspective, the elements require some expounding. For example, patient history should include past dental history, pertinent medical history (cancer, diabetes, cardiovascular disease, immunosuppression), pertinent family history

(cancer), social history (smoking, alcohol consumption, barriers to care), and history of the present complaint.

Histories are critical to reducing the risk of delay in diagnosis. Historical risk factors may trigger more frequent and more targeted oral assessments. In addition to including the medications used and prescribed by the dental practice, the dental record should contain information about the patient's allergies and pertinent chronic medications. Question patients directly about their use of medications known to affect dental decision making, such as bisphosphonates,[1] anticoagulants,[2] hypoglycemics,[3] oral bupenorphine,[4] and opioids. (Note the ADA 2016 statement on opioid use in dentistry recommends that dentists follow state and CDC opioid guidelines.)

Document the dental record with referral communications and include copies of referral documents sent and received. Document all clinical communications with patients and families. Use the telephone notes section of the electronic dental record (EDR), if available, or identify a suitable alternative within the record. The content of clinical communications that occur outside of an office visit may be as essential to the clinical picture as the visit note. Include a summary of the concern, questions asked and answered, and recommendations. Front desk staff should not provide clinical advice unless they have proof of education, training, and competence. Because dentists are responsible for the documentation of their unlicensed assistants, ensure that the information provided is accurate and complete by reviewing their notes periodically. If the patient communicates by email or text, incorporate the actual exchange into the record by printing and scanning.

Electronic Dental Records

EDRs have streamlined some office functions, such as scheduling, billing, and storing patient information. They also, however, present a number of documentation and patient safety risks. Dental record documentation should tell the story of the patient's care. It is much harder to get the story across in a template. When using an EDR, do not limit documentation to simply checking boxes. Every patient record should be personalized to the patient in some way. Often the record contains a free text note function for providers to document patient-specific information. Patients may be harmed when outdated information is pulled forward or copied and pasted and then relied on for current treatment. Ideally, copy and paste should not be used at all. Information should never be copied from one record to another.

EDR software tracks and logs documentation activities using descriptive information called metadata. Metadata exists in the memory behind what users can see on the screen. It typically includes information about who made the entry, when information was entered, and the length of time the record was open. Some electronic records also capture where clinical data originated—its provenance. A provenance audit can identify the original author and the location of copied and pasted material. Like information stored in other formats, metadata and provenance audits are discoverable and may be used during regulatory and legal proceedings.

Three Risks Contributing to Patient Harm

Table 1 identified the top three areas of risk created by insufficient or poor documentation: clinical findings, informed consent, and clinical rationales.

Clinical findings are the interpretations that result from a review of histories, oral assessments, diagnostic tests, procedures, and consult recommendations. After the actions associated with a dental examination or procedure are completed and documented, the negative and positive findings (present or absent) must be "appreciated" and included in the record. The review and management of dental radiographic findings are good examples. Both panography and cone beam computed tomography (CBCT) images can result in incidental findings. As dental radiography improves (particularly CBCT resolution), incidental findings become more frequent and diverse. Currently, no standard classification scheme exists for determining the importance of dental radiographic incidental findings.

"Good documentation practices include reviewing the most recent preceding visit and updating any outstanding problems, test results, or referrals."

Failure to note an incidental finding on a radiographic examination is an example of insufficient clinical documentation. The provider who orders and interprets the scan is responsible for the findings, regardless of whether they are directly related to the purpose of the scan. When incidental findings are located in structures that generally fall outside the area of interest (that is, extragnathic), a decision must be made as to whether the finding is benign, can be watched, or requires follow-up. The provider who performed the study owns the results until the findings are managed. It is not safe to ignore or fail to appreciate incidental findings.

A 2019 meta-analysis of CBCT incidental findings identified atherosclerotic calcifications in the carotid arteries (CAC) as a "life threatening" finding.[5] The frequency of CAC findings varies by study (5.7 percent to 11.6 percent in three studies),[5] and the risk varies by location (intracranial versus extracranial).[6] Dentists are cautioned to objectively document in the record the location of the incidental finding, a determination of clinical significance, and a management strategy. Management strategies may be informed by participating in an overread peer review service, selecting images of concern for head and neck radiology review, and collaborating with the patient's primary medical care provider on appropriate specialty referrals.

The second most frequent insufficient documentation finding was absent or limited informed consent. Informed consent is a process. The first step is a discussion with the patient about the main problem, planned procedure, risks, benefits, and alternatives to the procedure. Step two is providing the patient with an opportunity to ask questions, receive more education, and make an informed decision. Evaluate the patient's understanding using teach-back, and document the entire discussion in the record. "Consented patient" is not enough. Informed consent is not done to the patient; the process should be patient-centered and collaborative. To that extent, "patient consented" is not sufficient either. Consider the following example:

"Reviewed [intended procedure] with [name]. Discussed risks, benefits, and alternatives. Provided [educational] handout. Patient was able to accurately summarize the discussion, signed consent, and agreed to proceed."

Always document the informed consent discussion in a progress note and use a form when necessary. Florida has formalized requirements in the Florida Medical Consent Law (F.S. 766.103).

Tips to avoid informed consent pitfalls:

- Be honest about the likelihood of success. Discuss color matching, the need for adjustments, and the longevity of the work. Do not overpromise.
- Make sure the patient fully understands the risks. Translate consent forms into the major languages spoken by your patient population, and use an interpreter when needed. Do not use family members to interpret.
- Ensure that the likely risks are included in the discussion. In addition to pain and bleeding (as appropriate), include fractured teeth, migrating root tips, and equipment problems, such as fractured wire or burr. When discussing an unlisted risk, note it on the consent form or the informed consent procedure note.

- Use informed consent for dental sedation and anesthesia. Consent forms do not have to be limited to surgical procedures. Consider a form for treatments such as whitening, aggressive hygiene procedures, and ordinary care that presents risks specific to a particular patient.
- Document informed refusal. Patients have the right to refuse treatment. An informed refusal is a useful tool for documenting that the patient accepts the potential risk of refusing treatment.
- Find samples of consent and refusal forms on The Doctors Company's website at thedoctors.com/sampleconsentforms.

Documentation of clinical rationale is the final area for discussion of the risks created by insufficient documentation. Rationale is sometimes referred to as dental decision making. Documenting decision making is not only good patient safety practice and helpful to downstream dental providers, but it is also often essential to the defense of a board complaint or malpractice claim.

After documenting findings, dental professionals should summarize the findings into a differential diagnosis. Document the final or likely diagnosis and what was considered and ruled out. Establish a mechanism for ensuring that the follow-up occurs if the plan is to recheck something in a specific time frame. Good documentation practices include reviewing the most recent preceding visit and updating any outstanding problems, test results, or referrals. Document the record with all patient requests as well as any decisions made. If a patient request is denied, it is essential to document the clinical reasoning in the record.

Treat the clinical record as a legal document. Make sure the record tells the clinical story. Make sure the record will be a good witness. Ensure the record will represent the practice well if it is shared with patients, families, lawyers, and regulatory agencies. Document well.

References

1. Kawahara M, Kuroshima S, Sawase T. Clinical considerations for medication-related osteonecrosis of the jaw: a comprehensive literature review. Int J Implant Dent. 2021;7(1):47. Published 2021 May 14. doi:10.1186/s40729-021-00323-0
2. Felix J, Chaban P, Ouanounou A. Dental management of patients undergoing antithrombotic therapy. J Can Dent Assoc. 2020;86:k17. https://jcda.ca/k17
3. Borgakke WS, Poudel P. Diabetes and oral health: summary of current scientific evidence for why transdisciplinary collaboration is needed. Front Dent Med. 2021. https://www.frontiersin.org/articles/10.3389/fdmed.2021.709831/full
4. Food and Drug Administration Drug Safety Communication. FDA warns about dental problems with buprenorphine medicines dissolved in the mouth to treat opioid use disorder and pain. January 12, 2022. https://www.fda.gov/drugs/drug-safety-and-availability/fda-warns-about-dental-problems-buprenorphine-medicines-dissolved-mouth-treat-opioid-use-disorder
5. Dief S, Veitz-Keenan A, Amintavakoli N, McGowan R. A systematic review on incidental findings in cone beam computed tomography (CBCT) scans. Dentomaxillofac Radiol. 2019;48(7):20180396. doi:10.1259/dmfr.20180396
6. Mutalik S, Tadinada A. Assessment of relationship between extracranial and intracranial carotid calcifications-a retrospective cone beam computed tomography study. Dentomaxillofac Radiol. 2019 Dec;48(8):20190013. doi: 10.1259/dmfr.20190013. Epub 2019 August 21. PMID: 31386560; PMCID: PMC6951097

The guidelines suggested here are not rules, do not constitute legal advice, and do not ensure a successful outcome. The ultimate decision regarding the appropriateness of any treatment must be made by each healthcare provider considering the circumstances of the individual situation and in accordance with the laws of the jurisdiction in which the care is rendered.

The Alex and Heather Story

by Alex Nottingham

All-Star Dental Academy®

My journey in dentistry started with helping a very special person save his practice from bankruptcy. This special dentist was my father.

Dr. Charles had a 30-year career in dentistry (while "retired," he still occasionally fills in for friends), but dentistry wasn't always fun and rewarding.

As a young dentist, my father had dreamed of providing the best care for his patients while earning a respectable income, but he kept running into obstacles. Insurance companies exerted more influence on dentistry, not for the better (they were, and still are, driving down compensation and reducing patient benefits). Patients grew more demanding – especially when discussing financial matters – and unreliable about showing up for appointments. Freshly graduated dentists were opening practices all around him. And he had a partner in the practice that didn't share his vision.

It was a stressful existence, and my father struggled with the realities of running a practice.

The pain that can come with owning a dental practice had unfortunately drained my dad of his passion for dentistry. Despite being an AGD fellow, Pankey graduate, and a featured "Extreme Makeover" dentist, he had very little to show for his efforts.

His difficulties culminated when he found himself on the brink of bankruptcy.

I had proven myself as a business consultant while working with Tony Robbins and on my own, so my father swallowed his pride and asked for my help.

I took what I had used to help so many other businesses succeed and applied it to his practice.

After assuming operational management, I changed how we used our marketing budget, resulting in a **ton** of new patient calls. However, the office was failing to convert the calls into new patients.

No matter how I directed our marketing, new patient numbers were flat.

I came up with what seemed like an oddball scheme. I approached Heather, my girlfriend at the time (who is now my wife) and asked if she would help me in the practice. Heather had a background in high-end retail sales and customer service and had worked as a manager and trainer for premium retail service companies like Bloomingdale's, Kate Spade, and Theory. She had always talked about how vital her focus on client service was to her success.

The idea to bring in Heather paid off. BIG TIME!

Heather leveraged her experience working directly with demanding clients to train the dental practice staff to be more effective when serving patients. She also took over new patient calls and immediately got more prospects to convert into appointments. She also made a point of greeting patients by name when they came in for their appointments (and asking questions about things that came up in their phone conversations, such as "Hi Becky! I'm so happy to see you! How was Jane's birthday party?"). All of this resulted in happier patients who showed up, accepted treatment recommendations, paid on time, and referred friends and family.

Together, we took my father's dental practice from near-bankruptcy (even at $1 million in revenue) to a comfortable, sustainable, and predictable $2.4 million in revenue—in less than 18 months. Helping the practice transform in such a short time was an extremely rewarding experience. And it was great to help my dad.

It occurred to Heather and me that we could develop a training program to teach dentists and their staff how to replicate our success. We would combine the best teachings from consultants and trainers with our experience working with dental and medical practices. And, thus, All-Star Dental Academy® was born.

Our training program emphasizes developing a warm, trusting, and friendly relationship – commonly referred to as **rapport** – with patients.

This approach contrasts with a "traditional" dental sales process, where a receptionist essentially ignores rapport. Instead, you are taught to spend a minimal amount of time being "friendly" using phone call scripts before moving on to focus on **closing** (in dentistry, we use the term "closing" to refer to getting the caller to make an appointment). Unfortunately, this approach reflects a **"Get 'em in!"** philosophy and is the prevailing methodology that I see taught to dentists and their teams by most consultants and "training companies."

The "Get 'em in!" approach teaches that your only goal is to get the patient to make an appointment, **at any cost**. This means you don't answer questions, don't try to overcome objections, and to deflect any and all concerns on the part of the caller in favor of getting them into the office. This approach is manipulative and can go as far as to be unethical.

For instance, if callers have a question about insurance, the typical technique is to answer, **"I'm sure we can work with your insurance. Come on in and we'll deal with it when you get here."** This is the answer even if you know you don't work with their insurance!

This approach is so very WRONG. Because what happens is the new patient comes in, they have the wrong expectations about the appointment, they get angry about feeling mislead, and they leave displeased with the experience. Then, when they get home, they write a blog, tweet, Facebook post, Yelp, or Google review about what a bad experience they had in your office and tell everyone they know to avoid you and your practice. Ouch. Really bad stuff.

How many poor patient experiences like that can your practice survive?

In contrast to the "Get 'em in!" approach, we champion a patient-centered, customer/patient-service-based style of engaging a caller to ensure that you are the right practice to meet the patient's needs.

Here are a few tips on how to build rapport with your callers and new patients:

1. Use the caller's/patient's name in conversation. In Dale Carnegie's book *How to Win Friends and Influence People* (a must-read!), he once said, "A person's name is to that person the sweetest and most important sound in any language." In other words: If you want to have a positive impact on someone—to make them feel noticed, important, and valued—use their name! Simple!

2. Be Likeable. This may sound pedantic, but it does need to be said. When the office gets busy, or you are stuck with grumpy patients, it's easy to focus on the task at hand and forget to be friendly. Make a tricky job (working with patients) a bit easier by taking a breath and focusing on making their call or visit a memorable one just by being warm and open.

3. Build Trust with Sympathy. Patients who are in pain, or even simply uneasy about their appointment, crave an understanding and sympathetic voice on the other end of their call. Indeed, suggest that you understand their feelings and try to explain how you can work around an issue or fear, or emphasize why the treatment will be positive for them.

The vast majority of your effort and time with a caller should be spent on building rapport.

If you are successful at creating a connection with the caller, you can **easily** transition to understanding the caller's needs. If you can meet those needs, the caller will determine (on their own and without "selling"!) that you are the **logical and emotional choice** to serve them, and they make an appointment.

Over the past 10 years, Heather and I have worked closely with **thousands** of dental professionals like yourself to install a proven, service-based approach to the patient experience. And it begins with an understanding of how **every single interaction** with a patient can be leveraged (with rapport!) to improve clinical outcomes and patient satisfaction while reducing or eliminating challenges that prevent most practices from achieving all that they can.

Alex Nottingham has worked as a business consultant for companies with revenues from $1 million to $100 million and was the *#1 top-performing coach for Tony Robbins' business consulting group.* He co-wrote a best-selling book with business guru Brian Tracy on business success. He also had the great honor of sharing the stage with Michael Gerber, the World's Number One Small Business Guru and author of *The E-Myth*, where they talked about the value of training and how to implement efficient systems. All of this has gone into his work with dentists, and those he has worked with benefit from an improved approach to the business of dentistry - and their lives.

Florida Focus Self-Instruction:

Exercise 3221, 1 CEU

Subject 730, Oral Medicine, Oral Diagnosis, Oral Pathology

The ten questions for this exercise are based on the article, "An Update on Antibiotic Use and Infection Management in Dentistry" on page 7. Reading the article and successfully completing the exercise will enable you to:

- understand the rationale for the current guidelines on antibiotic use;
- understand the indications and contraindications for antibiotic use from an oral surgeon's and an endodontist's perspective;
- incorporate appropriate use of antibiotics into clinical practice.

Please email your answers with your name and AGD number to flagdeditor@gmail.com. 80% of the answers must be correct to received credit. Answers for this exercise must be received by September 30, 2022.

1. In 2019, an article in *JAMA* stated that ____% of prophylactic antibiotic prescriptions written by dentists were unnecessary.

A. 34

B. 52

C. 73

D. 81

2. A 2019 article in *JADA* recommended that antibiotics for target conditions be used when only focal involvement is present. The panel advised that immediate Definitive, Conservative Dental Treatment be prioritized in all cases.

A. Both statements are true.

B. The first statement is true; the second is false.

C. The first statement is false; the second is true.

D. Both statements are false.

3. _____ antibiotics are seldom warrented.

A. primary prophylactic

B. secondary prophylactic

C. primary therapeutic

D. adjunctive therapeutic

4. The incidence of infection is extremely low after tooth extraction and torus reduction. Antibiotics would provide no benefit except in the presence of periapical infection and multiple extractions.

A. Both statements are true.

B. The first statement is true; the second is false.

C. The first statement is false; the second is true.

D. Both statements are false.

5. Conditions requiring antibiotic prophylaxis include all the following except _____.

A. coronary heart disease

B. prosthetic cardiac valve

C. mitral valve prolapse with regurgitation

D. previous infective endocarditis

6. Only _____% of the U.S. population has a true penicillin allergy.

A. 0.2 - 0.8

B. 0.8 - 1.6

C. 1.2 - 1.8

D. 2.2 - 2.6

7. Secondary prophylactic antibiotics have not been recommended for patients with prosthetic joints since _____.

A. 2021

B. 2019

C. 2017

D. 2015

8. Indications for adjunctive antibiotics include

A. pupal necrosis

B. chronic apical abcess

C. symptomatic apical periodontitis

D. replantation of avulsed permanent tooth

9. _____ testing is crucial to adequate diagnosis. Anesthetic failure is well-documented for lower molars with _____.

A. Cold, irreversible pulpitis

B. Cold, infection

C. Heat, irreversible pulpitis

D. Heat, infection

10. Incision and drainage of a cellulitis is to be encouraged rather than avoided. When pus is not encountered during incision and drainage, the patient still gets better.

A. Both statements are true.

B. The first statement is true; the second is false.

C. The first statement is false; the second is true.

D. Both statements are false.

Florida Focus Self-Instruction:

Exercise 3222, 1 CEU

Subject 730, Oral Medicine, Oral Diagnosis, Oral Pathology

The ten questions for this exercise are based on the article, "Back to the Future of Dental Sleep Medicine" on page 11. Reading the article and successfully completing the exercise will enable you to:

- understand how the regulations and attitudes regarding dental sleep medicine have changed in the last twenty years;
- appreciate the technology of current Home Sleep Apnea Testing devices;
- understand the benefits of incorporating dental sleep medicine into clinical practice.

Please email your answers with your name and AGD number to flagdeditor@gmail.com. 80% of the answers must be correct to received credit. Answers for this exercise must be received by September 30, 2022.

1. Twenty years ago, obstacles to dental sleep medicine (DSM) included:

A. Dental appliances were only recognized as a secondary line of therapy by the American Academy of Sleep Medicine (AASM).

B. Sleep testing was required to be performed in the dental office of the practitioner.

C. Public awareness and physician acceptance were almost non-existent.

D. All of the above.

2. In 2006, new AASM parameters stated, "Oral appliances are indicated for use in patients with severe OSA who prefer them to continuous positive airway therapy (CPAP). Oral appliances should be fitted by qualified dental personnel who have completed 40 hours of training in DSM."

A. Both statements are true.

B. The first statement is true; the second is false.

C. The first statement is false; the second is true.

D. Both statements are false.

3. The 2006 changes in AASM parameters were based on _____.

A. a 2003 landmark study

B. multiple studies

C. increase patient awareness and demand

D. changes in medical insurance reimburse-ment

4. The 2015 update to the AASM parameters for DSM recommends that dental devices can be considered a _____ line of therapy for the estimated _____ OSA patients in the U.S.

A. second, 30 million

B. first, 54 million

C. first, 800,000

D. second, 2.4 million

5. Advantages and disadvantages of a home sleep apnea test (HSAT) include all the following except:

A. More expensive than polysomnograms

B. Well-tolerated by patients

C. Easily calibrated

D. Capture a more "normal night" of sleep

6. Collection of data with an HSAT must be followed by _____.

A. referral to a board-certified sleep physician

B. interpretation by a dentist who has completed 40 hours of training in DSM

C. interpretation online by a board-certified sleep physician

D. interpretation in accordance with the state dental board's public position

7. A 2021 survey by the American Academy of Dental Sleep Medicine (AADSM) revealed that only _____ states restrict the use of HSATs by dentists.

A. 20

B. 11

C. 7

D. 4

8. The Florida Board of Dentistry's public position on DSM states that dentists my only provide treatment for patients unable to tolerate CPAP. In addition, it states that patients undergoing multiple nights of sleep apnea testing must be referred to a board-certified sleep specialist.

A. Both statements are true.

B. The first statement is true; the second is false.

C. The first statement is false; the second is true.

D. Both statements are false.

9. Current HSAT technology typically takes _____ of testing and _____ to calibrate.

A. 1 night, 3 days

B. multiple nights, 2 months

C. multiple nights, 1 week

D. 1 night, 1 week

10. Additional advances in DSM include all of the following except one. Which is the exception?

A. The time requirements for the dentist have been reduced to 3-4 hours per patient.

B. Increased predictability has led to greater acceptance by physicians.

C. Medical insurance coverage is more widely available.

D. The devices are smaller and more effective.

Come for the World Class Education

Expand your knowledge and grow professionally with AGD2022's numerous education offerings

- One-hour Lectures
- CE Bundle Packages
- Blended Learning Session
- Dental Pearls and Emerging Speakers
- Advanced Hands-On Education
- New Dentist Lounge

Stay for the World Class Accommodations

While at the Rosen Shingle Creek resort in Orlando, FL, you can enjoy the following

- Recently renovated and stylish lodgings
- 15 restaurants and lounges serving all culinary tastes
- 18-hole championship golf course redesigned by Arnold Palmer Design Company
- 13,000 square foot full service day spa and elite salon
- Four seasonally heated swimming pools
- 255 acres of lush landscaping that includes a nature trail and outdoor sports courts

LEARN MORE
agd2022.org

PACE ACADEMY of GENERAL DENTISTRY PROGRAM APPROVAL FOR CONTINUING EDUCATION

Academy of General Dentistry
Nationally Approved PACE Program Provider for FAGD/MAGD credit.
Approval does not imply acceptance by any regulatory authority or AGD endorsement.
6/1/2018 to 5/31/2024
Provider ID# 216217