AAID, AAP ANNUAL MEETINGS

DENTAL TRIBUNE

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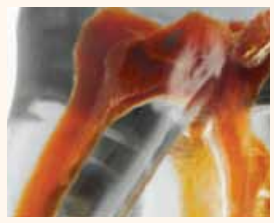
CREATE AND MAINTAIN AN EFFECTIVE EMERGENCY DRUG KIT

Part 2 of this two-part series helps you ensure your emergency drug kit is complete and up to date.

▸ page A6

ENDO TRIBUNE

HELPING DENTISTS LEARN



Highly accurate 3-D tooth replicas are redefining endodontic education.

▸ page B1

IMPLANT TRIBUNE

AAP MEMBERS GATHER IN LOS ANGELES

American Academy of Periodontology annual meeting, Sept. 29–Oct. 2.

▸ page C1

Researchers find clue that may get biofilm to leave teeth alone

Harmful bacteria on marine sponge collectively decide when it's time to break up and move on

A new study shows that when enough bacteria get together in one place, they can make a collective decision to grow an appendage and swim away. This type of behavior has been seen for the first time in marine sponges, and it could lead to an understanding of how to break up harmful bacterial biofilms, such as plaque on teeth or those found on internal medical devices, such as artificial heart valves.

Bacteria have ways of communicating with each other, and scientists have now identified a new signaling system that, when there is a critical mass of bacteria present, causes the bacteria to produce an appendage known as a flagellum that moves like a corkscrew and gives them the ability to swim away, inhibiting the formation of biofilm.

"Anything we can discover about this bacterial communication could be really important in understanding how bacteria become pathogenic in humans or how they form film on teeth or internal medical devices," said study coauthor Dr. Russell Hill, Director of the Institute of Marine and Environmental Technology in Baltimore. "Understanding that process may help in the future for controlling biofilms."

It is estimated that pound by pound there are more bacteria on the Earth than all other life forms combined. They are simple organisms that consist of one cell and can be seen only through a microscope. However, bacteria have evolved ways to gather into densely populated and slimy communities called "biofilms," which attach to hard surfaces. They also know how to talk to each other, and can make group decisions about how to behave, called "quorum sensing."

Just like in a business meeting, once enough bacteria gather in one place — or a quorum is met — a decision about their collective behavior can be made. This "quorum sensing" is responsible for a number of cellular processes, including triggering molecular mechanisms that can make the surface of the ocean light up at night and the gathering of bacteria that causes plaque on teeth, otherwise known as biofilm.

▸ See BIOFILM page A2

Online registration ends Sept. 27 for the American Academy of Implant Dentistry annual meeting, Wednesday through Saturday, Oct. 3–6, in Washington, D.C. After the 27th, you will need to register at the event, which the AAID describes as, 'Implant Dentistry: Debating the Options for Practical Solutions — Practical Education for the Practicing Implant Dentist.'
Photo/Provided by *www.sxc.hu*.

▸ See page C1

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◂ BIOFILM, page A1

The bacteria that colonize and are dependent on these marine sponges use quorum sensing to activate their locomotion when their population becomes dense, naturally limiting the amount of biofilm they form.

"This precise calibration of the bacterial interactions within the sponge may have evolved to help maintain a healthy, well-distributed symbiotic population," said study coauthor Clay Fuqua of Indiana University. "Similar mechanisms may be at play in other complex microbial communities within hosts such as those within human intestines and in symbiotic plants."

The study, by scientists from the University of Maryland Center for Environmental Science's Institute of Marine and Environmental Technology, Indiana University, and University of Colorado Denver's School of Medicine, is in the September 2012 issue of Molecular Microbiology.

The marine sponge research is the latest in a series of discoveries to emerge from long-running efforts to find new ways of combatting biofilm in humans to improve oral health.

Most bacteria in nature exist in communities of biofilms, structures that serve as physical barriers and severely limit the effect of antibacterial agents. Oral biofilms are commonly associated with infections such as cavities, gingivitis and periodontal disease. With antibiotic resistance continually on the rise, researchers are constantly exploring alternative sterilization methods to effectively treat biofilms.

In another recent effort, researchers from Hebrew University, Hadassah, Jerusalem, Israel and the University of California San Francisco, determined that the blue light commonly used by dentists to cure resin fillings, when combined with hydrogen peroxide (H_2O_2), may be capable of reaching and treating bacteria in deep layers of biofilms that can cause cavities and gingivitis.

The study exposed biofilms of *Streptococcus mutans* to wavelengths of visible light consisting of 400-500 nm for 30-60 seconds while in the presence of 3-300 mM of hydrogen peroxide. Microbial counts from each treated sample were compared with those of the control and results showed that visible light and hydrogen peroxide combined successfully penetrated all layers of the biofilm creating an antibacterial effect.

"The ability of noncoherent visible light in combination with H_2O_2 to affect bacteria in deep layers of the biofilm suggests that this treatment may be applied in biofilm-related diseases as a minimally invasive antibacterial procedure," the researchers said.

(Sources: Indiana University, the University of Colorado Denver's School of Medicine, the University of Maryland Center for Environmental Science's Institute of Marine and Environmental Technology, the American Society for Microbiology and Science Daily)

Marine sponges harbor complex and diverse bacterial communities, in some cases as much as 30 to 40 percent of the sponge's biomass. This high density of bacteria is an ideal place to study signaling, or how bacteria talk to each other using small chemical molecules.
Photo/Provided by Carolyn Seelen, *www.dreamstime.com*

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PUBLISHER & CHAIRMAN
Torsten Oemus *t.oemus@dental-tribune.com*

CHIEF OPERATING OFFICER
Eric Seid *e.seid@dental-tribune.com*

GROUP EDITOR
Robin Goodman *r.goodman@dental-tribune.com*

EDITOR IN CHIEF DENTAL TRIBUNE
Dr. David L. Hoexter *feedback@dental-tribune.com*

MANAGING EDITOR U.S. AND CANADA EDITIONS
Robert Selleck *r.selleck@dental-tribune.com*

MANAGING EDITOR
Fred Michmershuizen
f.michmershuizen@dental-tribune.com

MANAGING EDITOR
Sierra Rendon *s.rendon@dental-tribune.com*

MANAGING EDITOR SHOW DAILIES
Kristine Colker *k.colker@dental-tribune.com*

PRODUCT & ACCOUNT MANAGER
Mara Zimmerman
m.zimmerman@dental-tribune.com

MARKETING DIRECTOR
Anna Kataoka-Wlodarczyk
a.wlodarczyk@dental-tribune.com

PROJECT & EVENTS MANAGER
Lorrie Young *l.young@dental-tribune.com*

C.E. DIRECTOR
Christiane Ferret *c.ferret@dtstudyclub.com*

Dental Tribune America, LLC
116 West 23rd St., Ste. #500
New York, N.Y. 10011
(212) 244-7181

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Coconut oil could combat tooth decay

The natural antibiotic would be added to commercial dental care products

Digested coconut oil is able to attack the bacteria that cause tooth decay. It is a natural antibiotic that could be incorporated into commercial dental care products, say scientists presenting their work at the Society for General Microbiology's Autumn Conference at the University of Warwick, in Ireland.

The discovery that coconut oil has potential as a marketable, natural antimicrobial for inclusion in dental-care products has a team of Irish researchers smiling.
Photo/Provided by Dan Klimke, *www.Dreamstime.com*

Inhibited the growth of most strains of Streptococcus bacteria

The team from the Athlone Institute of Technology in Ireland tested the antibacterial action of coconut oil in its natural state and coconut oil that had been treated with enzymes, in a process similar to digestion.

The oils were tested against strains of *Streptococcus* bacteria that are common inhabitants of the mouth. The team of researchers found that enzyme-modified coconut oil strongly inhibited the growth of most strains of *Streptococcus* bacteria, including *Streptococcus mutans* — an acid-producing bacterium that is a major cause of tooth decay.

Earlier foodstuff studies prompted coconut-oil research

Many previous studies have shown that partially digested foodstuffs are active against microorganisms. Earlier work on enzyme-modified milk showed that it was able to reduce the binding of *S. mutans* to tooth enamel, which prompted the group to investigate the effect of other enzyme-modified foods on bacteria.

Further work will examine how coconut oil interacts with *Streptococcus* bacteria at the molecular level and which other strains of harmful bacteria and yeasts it is active against.

Additional testing by the group at the Athlone Institute of Technology found that enzyme-modified coconut oil was also harmful to the yeast *Candida albicans*, which can cause thrush.

No chemical additives and avoids concerns with antibiotic resistance

The researchers suggest that enzyme-modified coconut oil has potential as a marketable antimicrobial, which could be of particular interest to the oral health care industry.

Dr. Damien Brady, who is leading the research, said, "Dental caries is a commonly overlooked health problem affecting 60 to 90 percent of children and the majority of adults in industrialized countries.

"Incorporating enzyme-modified coconut oil into dental hygiene products would be an attractive alternative to chemical additives, particularly as it works at relatively low concentrations. Also, with increasing antibiotic resistance, it is important that we turn our attention to new ways to combat microbial infection."

The work also contributes to our understanding of antibacterial activity in the human gut.

"Our data suggests that products of human digestion show antimicrobial activity. This could have implications for how bacteria colonize the cells lining the digestive tract and for overall gut health," Brady said. "Our research has shown that digested milk protein not only reduced the adherence of harmful bacteria to human intestinal cells but also prevented some of them from gaining entrance into the cell. We are currently researching coconut oil and other enzyme-modified foodstuffs to identify how they interfere with the way bacteria cause illness and disease," he said.

(Sources: Society for General Microbiology, Athlone Institute of Technology, AlphaGalileo Foundation and Science Daily)

Direct mail, email or social media: What's best in dental practice marketing?

There's been a swing in the electronic-versus-paper pendulum

SALLY MCKENZIE is CEO of McKenzie Management, which provides success-proven management solutions to dental practitioners nationwide. She is editor of *www.thedentistsnetwork.net* (The Dentist's Network Newsletter), the e-Management Newsletter at *www.mckenziemgmt.com* and The New Dentist™ magazine at *www.thenewdentist.net*. She can be reached at *sallymck@mckenziemgmt.com* or (877) 777-6151.

By Sally McKenzie, CEO McKenzie Management

You may have heard that the U.S. Postal Service is losing money. Evidently people aren't sending as many letters through the mail, and more are paying their bills electronically. So what does this mean for dentistry? Plenty. For starters, that friendly mail carrier just might be the key link between you and a host of new patients.

Today, direct mail marketing is as strong as it has ever been. Why? The obvious reason is that fewer businesses are using it. Instead they are filling up your electronic mail box with special offers, promotions, catalogs, coupons and the list goes on. They are inundating consumers with email; consequently, what was once old is new again. Snail mail marketing is back, and we're all the better for it.

While electronic communication and marketing have exploded, so too has the amount of digital garbage. Spam and junk email folders collect hundreds of marketing missives that are targeted for us but miss their mark. Web page ads become digital wallpaper on our computer screens. It's there, but we don't notice it like we did when it was new. Don't get me wrong; email and electronic communication are absolutely critical in effectively marketing a dental practice. But they are only part of a total marketing strategy.

What's particularly interesting about the swing of the electronic vs. paper marketing pendulum is that while people won't hesitate to click "delete" to rid themselves of the multitude of electronic distractions, they will take time to actually look at a flier, brochure, newsletter or postcard sent through traditional mail. For a few seconds or a few moments, when a person is reading the expertly written letter or the professionally designed postcard sent through the mail, you have a captive and engaged audience.

What's more, direct mail can be used for a multitude of marketing purposes, including generating new patients, reconnecting with former patients, creating awareness of the practice in the community, educating patients and the community about services, and the list goes on.

Case in point: "Dr. Maxwell" recently took over a practice in a smaller southwestern city. The dentist she bought it from was retiring after many years. Maxwell has invested a fortune in updating the equipment, technology and décor. The place looks fantastic, but the patient base under her predecessor had been dwindling. There were plenty of patient records, but the problem was that only a fraction of them were active. Maxwell needed to get her practice name into the community. She needed to reconnect with former patients, and she needed to set herself apart from the other dentists in the area.

To her credit, she didn't attempt to go it alone. Maxwell worked with a professional dental marketing company to establish her practice's brand, develop a custom website and train her team. But even with several marketing pieces in place, the puzzle still wasn't coming together. She needed to increase the number of new patients.

Direct mail, like many marketing tools, tends to be misunderstood. Typically, dentists will claim that direct mail doesn't work, doesn't deliver the patient numbers they want and is too expensive to bother with in this age of electronic communication. Yet, few truly under-

stand how direct mail works and the fact that the return on this investment can be huge — provided it's done right. However, as is often the case, it's not the "tool" that fails; typically it's the manner in which it is used. In other words, most direct mail campaigns that don't produce results are poorly executed.

In Maxwell's case, an overall marketing strategy was developed for the practice to implement over the long term. One component of that strategy was a direct mail campaign. During the course of 12 weeks, the campaign targeted prospective patients with professionally designed direct mail pieces. The phones were ringing. Her staff was trained to handle the increased phone and patient activity, and she was well on her way to rebuilding the practice patient base.

Email and social media: marketing answer or just a fad?

Certainly, direct mail is a long-standing staple of marketing, and while social media has become increasingly important in an overall marketing plan, it's critical that electronic communication be used, but not abused.

Certainly, there are exceptions to the rule, but the vast majority of patients would happily receive information on practice services, an occasional electronic newsletter and definitely appointment confirmations through email.

Consider the numbers. According to *www.b2bemailmarketing.com*, email is used far more than Facebook and Twitter combined. How much more? Daily activity for Facebook is pegged at 60 million updates. Twitter sees about 140 million tweets per day. Email? 188 billion messages. Clearly, email has become a primary mode of communication in this electronic age.

Used wisely and as one component of a multipronged and clearly defined practice marketing strategy, email can be an excellent and efficient means of staying in contact with patients in between appointments. It's not the only way or the single best way to communicate with them, but, if done well, email can help you to effectively market your services, your team and your practice.

Getting the process in place won't happen overnight, and while it does take time and some professional guidance, it begins with asking your patients one simple question: May I have your email address so that we can send you appointment reminders and other practice information?

The vast majority of your patients will be more than willing to share their email addresses with the office. They may want some assurances that their information will be kept confidential and not sold to any other third party vendor. And there are specific laws and regulations that must be followed when sending email, so seek the guidance of a professional dental marketing service. But done right and as part of an overall marketing plan, email marketing can be yet another excellent tool in an ongoing and effective practice promotion strategy.

Once you have collected 500 or more email addresses, you can begin developing a plan to communicate with patients.

Most practice management software programs enable you to automatically remind patients of upcoming appointments via email. An occasional email newsletter can be ideal for informing patients about new services in the practice. If you are active in your community or engaged in volunteer work or mission trips, an email newsletter is an excellent, cost-effective tool for communicating to patients what's happening with the practice, the doctor and the team.

The type of information that you would include in the newsletter would be reflective of your practice's brand. It would be geared toward the target audience that you and your professional dental marketing company have identified.

One of the best aspects of email is that it can be used to not only improve communication with patients, but also to improve practice efficiency.

An email and text appointment reminder is a service that all offices should offer. Certainly, not all patients will be interested and it is important to ask them first. But more and more people prefer email and/or text message reminders to telephone reminders.

That being said, some individuals with particularly frenetic and busy lives will want all three — phone, email and text. This is a simple step to help ensure that patients are in the chair at the appointed time, which keeps production on track and overhead under control.

Effective use of email raises the logical question, what about social media? Practices without a clearly developed marketing plan and strategy will oftentimes look to social media as the quick and easy answer. They think if they create a Facebook page, new patients will come flocking. In actuality, Facebook alone does virtually nothing for a practice. It can be incorporated into an overall marketing strategy as a means of keeping patients that have "friended" or "like" the practice informed about new services, team activities in the community and the like.

But be wary of those who claim that all you need to market your practice is email and social media. Truth be told, these are relatively small pieces of a total practice marketing plan. They are not free and they are not the "silver bullet" that will drive droves of patients to your door.

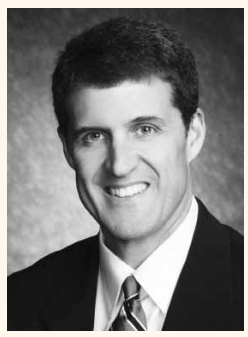
Marketing, like dentistry, is both an art and a science. There is no single treatment that will cure all dental disease. The same holds true for marketing the dental practice. There is no "silver bullet" technique to effectively market dentistry. It requires a plan, a strategy and a system that is an integral part of running the business.

Dental office emergency drugs

Part 2: Understand critical office resuscitative emergency (CORE) drugs before you need them

By John Roberson, DMD

Editorial Note: Part 1 of this two-part article was published in the July 2012, Vol. 7, No. 7, Dental Tribune U.S., which is available online at www.Dental-Tribune.com.



JOHN B. ROBERSON, DMD, is a full-time practicing oral and maxillofacial surgeon. He is board certified by the American Board of Oral & Maxillofacial Surgery and the National Dental Board of Anesthesiology. He is a co-founder and former CEO of the Institute of Medical Emergency Preparedness (IMEP), and he co-developed the curriculum for Advanced Life Support for Dentistry (ALSD), which covers medical emergencies, airway emergencies, emergency drug kits and medical emergency planning. He co-developed the Emergency Response System (ERS), a comprehensive medical emergency program for the dental profession. Roberson performed his residency in oral and maxillofacial surgery at University Hospital at the University of Cincinnati. He is a founding member of the American Association of Oral & Maxillofacial Surgeons Residents Organization (ROAAOMS) and served as chairman. Roberson lectures extensively on emergency drugs and medical emergencies. Interested organizations can contact him at (601) 261-2611 or *info@drjohnroberson.com*.

Photo/Provided by Alexey Lisovoy, *dreamstime.com*

Key points from Part 1

Every dentist should realize that medical emergencies can, do and will happen during the course of practice. These emergencies could be related to dental treatment, patient risk factors, or they could occur unexpectedly. A medical emergency could evolve into a life-threatening emergency without proper treatment. It is for these reasons emergency medications should be present in dental offices.

Part 2 looks in detail at the CORE (Critical Office Resuscitative Emergency) eight emergency drugs needed for dental offices and suggested emergency medications for practices doing advanced anesthesia.

The CORE 8

Albuterol

Definition: Bronchodilator — stimulates beta-2 adrenergic receptors causing bronchodilation.

Use: Bronchospasm (acute asthmatic attack).

Dosage: One to two puffs per dose.

Caution: No contraindications to using albuterol in acute episodes of bronchospasm.

Suggested stock: One albuterol MDI inhaler.

Ammonia inhalants

Definition: A respiratory stimulant.

Use: Syncope/fainting/loss of consciousness.

Dosage: 1–2 vaporules.

Suggested stock: One box of ammonia vaporules.

Aspirin

Definition: Anti-platelet — inhibits prostaglandin synthesis and inhibits platelet aggregation irreversibly.

Use: Suspected myocardial infarction.

Dosage: One 325-mg non-enteric, coated aspirin tablet, chewed and swallowed or four 81 mg chewable tablets, chewed and swallowed.

Caution: Aspirin should not be given to persons who are allergic to it or have active gastrointestinal bleeding.

Suggested stock: One or two packets of chewable 325-mg non-enteric, coated aspirin or four 81 mg chewable tablets.

Diphenhydramine

Definition: Antihistamine — antagonizes histamine at the H-1 receptor, causes sedation and has an anti-cholinergic effect.

Use Allergic reaction/anaphylaxis.

Dose: 50 mg IM or IV.

Caution: No contraindications to giving diphenhydramine during an allergic reaction unless noted allergy or hypersensitivity to diphenhydramine.

Suggested stock: 1) Two 1-ml ampules or vials of diphenhydramine 50 mg/ml and/or 2) Diphenhydramine HCL capsules 25 mg.

Epinephrine 1:1,000

Definition: Cardiac stimulant/anaphylaxis — activates alpha and beta-adrenergic receptors increasing heart rate, myocardial contractility, bronchial dilation and decreases peripheral vascular resistance.

Use: Anaphylaxis/bronchospasm.

Dosage: 0.3 mg IM q5 minutes.

Caution: No contraindications to giving epinephrine during anaphylaxis.

Suggested stock: 1) Two auto-injectors of epinephrine in adult form and pediatric form (EpiPen and EpiPen Jr) and 2) Two 1-ml ampules or vials of epinephrine 1:1,000.

Glucose source

Definition: Anti-hypoglycemic — increases glucose level for treatment of hypoglycemia.

Use: Hypoglycemia.

Dosage: One tube of glucose gel.

Caution: Unconsciousness. Never administer anything orally to an unconscious person.

Suggested stock: 1) Three tubes of glucose gel (InstaGlucose™) and 2) Three tubes of glucose tablets.

Nitroglycerin

Definition: Anti-anginal — stimulates cGMP production, which relaxes vascular smooth muscle specifically in the coronary arteries in the presence of an anginal attack.

Use: Chest pain (angina).

Dosage: The usual dose of nitroglycerin is one sublingual (0.4mg) tablet or one spray (0.4mg) from nitroglycerin spray atomizer administered q5m.

Caution: Patients with low blood pressure.

Suggested stock: One bottle of 25 tablets *or* one spray atomizer.

Oxygen

Use: Almost any type of medical emergency.

Dosage: At least 2 liters/minute.

Caution: Do not use with hyperventilation.

Suggested stock: One portable "E" cylinder of oxygen with regulator and the equipment necessary to deliver O2 to the victim (nasal cannula and ambu-bag).

Dental practice staffs must be prepared to address medical emergencies that can, do and will happen during the course of practice. Photo/Provided by NHTSA Image Collection

Additional emergency drugs for consideration

These additional emergency drugs are suggested for practices that do any type of advanced anesthesia, such as PO sedation, IV sedation, or general anesthesia.

Practitioners may have their own choices of emergency drugs due to their type of practice as well as training background.

Reversal agent — benzodiazepine

Flumazenil (Romazicon) — benzodiazepine antagonist: reverses effect of benzodiazepines by competively inhibiting the GABA receptors.

Reversal agent — narcotics

Naloxone (Narcan) — narcotic antagonist: reverses the effect of narcotics by competively inhibiting narcotic receptor sites.

Injectable anti-convulsant

Midazolam or diazepam: a benzodiazepine that acts on the inhibitory neurotransmitter gamma amino butyric acid (GABA), limbic system, hypothalamus and thalamus to produce sedation, anti-anxiety effect and skeletal muscle relaxation.

Injectable anti-hypoglycemics

Dextrose (50 percent dextrose) — anti-hypoglycemic: a source of calories and fluid for patients that are not able to take oral fluids in the event of a hypoglycemic reaction.

Glucagon (GlucoGen) — anti-hypoglycemic: causes a rise in blood glucose levels by promoting hepatic glycogenolysis and gluconeogenesis.

Injectable anti-cholinergic

Atropine — anti-cholinergic: antagonizes acetylcholine at the muscarinic receptors, increasing the heart rate as well as having an anti-sialagogue effect.

Injectable corticosteriod

Hydrocortisone (Solu-Cortef) — anti-inflammatory: a corticosteroid secreted by the adrenal cortex which has anti-inflammatory, anti-allergic, mineralocorticord activity and stimulates gluconeogenesis.

Dexamethasone — anti-inflammatory: a corticosteroid secreted by the adrenal cortex; it has anti-inflammatory, anti-allergic, glucocorticord activity and stimulates gluconeogenesis.

Injectable anti-hypertensive

Esmolol — beta-antagonist: is a cardioselective beta1 receptor blocker with rapid onset and a very short duration of action, with no significant intrinsic sympathomimetic or membrane stabilizing activity at therapeutic dosages. It decreases the force and rate of heart

▸ See EMERGENCY page A8

DO YOU HAVE A
PLAN TO
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Patient demonstrations highlight 6-day event

Greater New York Dental Meeting scientific session, Nov. 23–28; exhibit floor: Nov. 25–28

September starts the countdown to the largest dental congress and health care meeting in the United States. Photo/Provided by GNYDM

Registration is open for the 2012 Greater New York Dental Meeting (GNYDM), the largest dental congress and healthcare meeting in the United States, with 53,789 attendees from all 50 states and 127 countries in 2011.

A significantly expanded international program accommodated 6,656 international visitors in 2011, with sessions in French, Spanish, Portuguese, Italian and Russian.

The 2012 meeting runs Friday through Wednesday, Nov. 23–28.

The high-energy event, which never has a pre-registration fee, draws top dental professionals with an expansive exhibit hall and more than 300 educational courses, including full-day and half-day seminars, essays, hands-on workshops and a live, 430-seat, high-tech patient demonstration area.

New York City is full of cultural enclaves that give attendees the opportunity to experience foods, festivals, arts and more from all over the globe. Few cities offer a wider variety of iconic attractions, historic buildings and cultural sites.

Three major international airports, Newark Liberty (EWR), Kennedy (JFK) and La Guardia (LGA) and discounted hotel rates for registrants, make it easy for any dental professional to visit New York City and attend the meeting.

The GNYDM staff encourages you to see all New York City has to offer during one of its most beautiful times of year.

(Source: Greater New York Dental Meeting)

◂ EMERGENCY, page A6

contractions by blocking beta-adrenergic receptors of the sympathetic nervous system.

Labetolol — beta-antagonist: is a mixed alpha/beta adrenergic antagonist, which is used to treat high blood pressure.

Hydralazine: is a direct-acting smooth muscle relaxant used to treat hypertension by acting as a vasodilator primarily in arteries and arterioles.

Injectable anti-arrhythmic

Adenosine (Adenocard) — anti-arrhythmic: used for treatment of paroxysmal supraventricular tachycardia by slowing conduction time through the AV node as well as interrupting the re-entry pathways through the AV node.

Amiodarone (Cordarone) — anti-arrhythmic: a class III agent that inhibits adrenergic stimulation, which prolongs the action potential, decreases AV conduction and sinus node function. It is used for life-threatening recurrent ventricular fibrillation or hemdynamically unstable ventricular tachycardia.

Lidocaine – anti-arrhythmic: is a class 1B anti-arrhythmic drug that is used intravenously for the treatment of ventricular arrhythmias.

Verapamil (Isoptin/Calan) – anti-arhythmic: used for the treatment of paroxysmal supraventricular tachycardia, atrial flutter and atrial fibrillation.

Vasopressin (Pitressin) – an anti-diuretic hormone: adjunctive treatment used in pulseless ventricular tachycardia/ventricular fibrillation.

Conclusion

In conclusion, the emergency drug kit is essential for the practice of dentistry. No practitioner is able to determine when he or she will be faced with a medical emergency that will require the use of emergency drugs. It is for that reason alone, dental healthcare practitioners should stay up-to-date on medical emergencies as well as the drugs used to treat them. Develop a regular protocol to where you and your staff are able to rehearse various emergencies using your emergency drugs. Know their actions along with the route of administration.

You and your staff should always know the location of your emergency drugs. Assign a staff member the role of reviewing your emergency drugs each month to prevent expiration of these drugs. Check out the emergency drug tracker from Emergency Drug Resource (*www.buildyourowndrugkit.com)* as another way to assist you in developing an expiration prevention program. None of us know when our patient's life may depend on our readiness — and having the proper emergency drugs.

Disclaimer

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This publication contains information relating to general principles of medical care that should not be construed as specific instructions for individual patients.

Manufacturers' product information and package inserts should be reviewed for current information, including contraindications, dosages, and precautions.

The purpose of this article is to provide information only, rather than advice or opinion. Nothing in this article should be construed as setting a standard of care or practice recommendations.

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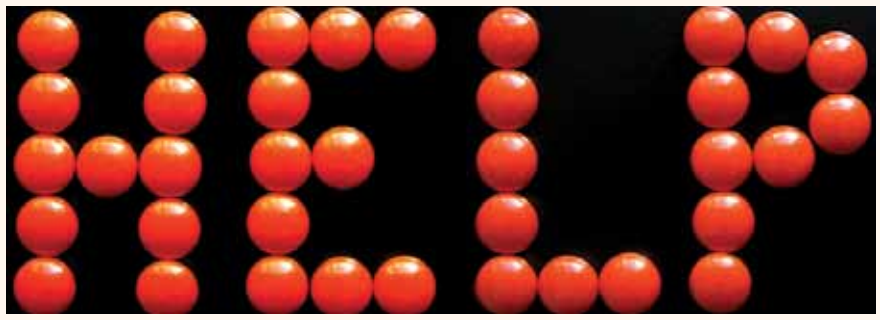

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References

1. Journal of the American Dental Association, Volume 133, No 3, 364–365 titled "Office Emergencies and Emergency Kits"
2. Journal of the American Dental Association, May 2010, Supplement on Medical Emergencies
3. Package Insert on Local Anesthesia, "WARNINGS" section
4. Wikipedia: Central Nervous System
5. American Heart Association
6. Advanced Cardiovascular Life Support (ACLS)
7. Pediatric Advanced Life Support (PALS)
8. CRASH CART, SAJITH KUMAR. RN, RM, MScN / Emergency Medicine; *www.emergencymedicinemims.com*
9. *www.acls-algorithms.com*
10. Emergency Drug Tracker, compliments of Emergency Drug Resource, *www.buildyourowndrugkit.com*

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