Dental office emergency drugs, Part 1

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

By John Roberson, DMD

Key points on emergency drug kits
1) An emergency drug kit is critical in the dental setting. The ADA states that all dentists should have an emergency drug kit, equipment and knowledge to use all items.
2) Emergency drugs along with their actions and dosages should be known by the dentist and his or her team.
3) Know how to use your emergency drug kit before the emergency in your office.
4) Know the location of your emergency drug kit.
5) Develop an emergency drug logbook and review your drugs each month.
6) Never administer an expired drug.
7) Know how to administer each emergency drug in your kit.

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 in the dental environment. 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.

The majority of states require certain emergency medications if the dentist is performing any type of advanced anesthesia such as minimal and moderate sedation (either PO or IV) as well as deep sedation/general anesthesia.

Emergency drug kit development
Dentists can develop their own emergency drug kit.
1) Know which drugs you will need in your office.
   • Do you need just the "Core-8" drugs?
   • Do you need more advanced medications such as used in ACLS or PALS protocols?
   • Dentists should be thoroughly knowledgeable about the emergency drugs they have in their office.
2) Purchase those drugs and then maintain them in some type of container, whether it is a plastic container/box or a metal crash cart.
3) Place these emergency drugs in zip-top bags or smaller plastic containers with color coded labels for easy identification.
4) Know the medical emergencies for which these emergency drugs are used.
5) Develop an emergency drug logbook and keep up with your drugs and their expiration dates.
6) Assign a staff member to serve as the "Emergency Drug Safety Officer," charged with the responsibility of ordering and maintaining the emergency drug kit.
7) Do you need emergency drugs for pediatric patients?

Note: Many dental software programs may already have a "task manager" or you may have Microsoft Outlook on your computer. You can enter each of your emergency drugs along with their dosage and expiration dates into the software. You can then easily access the information when needed.

* See EMERGENCY page A4

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expiration dates so a reminder is sent to you before the actual expired date. Also, at monthly staff meetings, encourage emergency medications as a regular topic so that area is covered each month and you can prevent your drugs from being expired.


“In designing an emergency drug kit, the Council suggests that the following drugs be included as a minimum: epinephrine 1,000 (injectable), histamine-blocker (injectable), oxygen with positive-pressure administration capability, nitroglycerin (sublingual tablet or aerosol spray), bronchodilator (asthma inhaler), sugar and aspirin. Other drugs may be included as the dentist’s training and needs mandate.

“It is particularly important that the dentist be knowledgeable about the indications, contraindications, dosages and methods of delivery for all items included in the emergency kit. Dentists are also urged to perform continual emergency kit maintenance by replacing soon-to-be-outdated drugs before their expiration.

“Local anesthesia is the backbone of pain control in dentistry. Dentists realize and know that adverse events can occur before, during or after administration of local anesthesia. Package insert (PI) of all local anesthetics clearly illustrates the importance of the dental practitioner having the proper equipment and resuscitative drugs prior to administering any local anesthetic.” Here is what the “warnings” section states:

“Dental practitioners who employ local anesthetic agents should be well versed in diagnosis and management of emergencies which may arise from their use. Resuscitative equipment, oxygen and other resuscitative drugs should be available for immediate use.”

**CANAL acronym**

Medical emergencies happen in dental offices, and we must be ready to respond. Here is an acronym that could assist you in trying to remember the many emergencies, along with the emergency drugs that could potentially be used to treat those emergencies.

**C = Cardiac**
- Chest pain: oxygen, nitroglycerin
- Myocardial infarction: oxygen, aspirin
- Dysrhythmias: ACLS drugs

**L = Loss of consciousness**
- Syncope: ammonia
- Sudden cardiac arrest: AED
- Hypoglycemia: glucose
- Stroke

**A = Airway**
- Foreign body obstruction: airway
- Bronchosopam: albuterol, oxygen, epinephrine
- Laryngospasm: oxygen, succinylcholine
- Hyperventilation
- Aspiration/Emesis: airway

**N = Neurological**
- Seizures: anti-convulsant
- Transient ischemic attack
- Stroke
- Panic attack: anti-anxiety agent
- Anxiety: anti-anxiety agent

**O = Other**
- Latex allergy: diphenhydramine
- Anaphylaxis: epinephrine, diphenhydramine, albuterol, dexamethasone
- Allergic reaction: diphenhydramine
- Epinephrine overdose: oxygen
- Benzodiazepine overdose: flumazenil
- Local anesthetic overdose: oxygen
- Narcotic overdose: naran

**E = Endotracheal intubation**
- Airway
- Anaphylaxis: epinephrine, diphenhydramine, albuterol, dexamethasone
- Allergic reaction: diphenhydramine
- Epinephrine overdose: oxygen
- Benzodiazepine overdose: flumazenil
- Local anesthetic overdose: oxygen
- Narcotic overdose: naran

The Council suggests that the following be included as the minimum in dental offices. They are:

- Epinephrine 1:1,000 (injectable)
- Oxygen with positive-pressure administration capability
- Nitroglycerin (sublingual tablet or aerosol spray)
- Bronchodilator (asthma inhaler)
- Sugar and aspirin
- Other drugs would be used.

These eight emergency drugs should be available in all dental offices that are ready to address the medical emergencies for which such drugs would be used. These eight emergency drugs should be the minimum in dental offices. They are:

- Epinephrine: for anaphylaxis, bronchospasm
- Benadryl: for allergic reactions, anaphylaxis
- Albuterol: for asthmatic attack, bronchospasm
- Nitroglycerin: for angina
- Aspirin: for suspected myocardial infarction
- Glucose: source for diabetic emergency (hypoglycemia)
- Ammonia: inhalants for syncope
- Oxygen: as supplemental adjunct.

**Eight CORE drugs**

Here is a suggested list of the CORE (Critical Office Resuscitative Emergency) eight emergency drugs needed for each dental office, with suggested other emergency medications for those doing advanced anesthetics. Confirm with your state dental board the mandatory emergency medications you must have in your office. Emergency drugs should be available in all dental offices that are ready to address the medical emergencies for which such drugs would be used. These eight emergency drugs should be the minimum in dental offices. They are:

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- Albuterol: for asthmatic attack, bronchospasm
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**Note:** Part 2 in this two-part series will cover the eight CORE drugs in more detail.

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Conference covers ‘all things’ esthetic

The International Association of Comprehensive Aesthetics describes itself as being a progressive, apolitical, dynamic, scientific association that is receptive to all philosophies and ideas.

That all-inclusive philosophy also guides the tone of its annual scientific conference, held this year in Hollywood, Fla.

The annual IACA conferences present a variety of lectures and hands-on workshops by world-renowned professionals in their respective fields. Conference attendees develop comprehensive esthetic treatment skills, network with a wide variety of health-care professionals and are introduced to proven practice-management techniques, all of which lead to the common goal of building a successful comprehensive esthetic practice.

Among the more than 30 educational sessions and 21 hours of CE courses this year: Total Body Health, Sleep Apnea, Pediatric Orthodontics, Relating TMD to Ortho and Sleep Apnea, Science of Teeth Whitening, Expanding the Boundaries of Neuromuscular Dentistry, and Surgical/Restorative Complications in Oral Implantology.

The next annual conference after the July 26-28 event in Florida is Aug. 1-3, 2013, in Calgary, Alberta, at the Telus Convention Centre.

The association defines its mission as follows: “To elevate aesthetic dentistry around the world through an exchange of doctors’ experiences and knowledge for the betterment of humanity. To remain a dynamic dental organization that serves as a catalyst for the fusion of contributions from all disciplines that serve mankind in attaining health and beauty.”

But, as the association’s annual conference confirms, there’s also a strong focus on helping dental professionals keep their profession as enjoyable as possible. The IACA was established not only to provide a vehicle for health-care professionals to learn and experience advanced oral health and practice management education. But also, to create an enjoyable environment in which dentists and their team members can interact.

The IACA is headquartered in Las Vegas. You can contact the association by phone at (866) NOW-IACA or via email at info@theIACA.com. Visit its website at www.theiaca.com.

(Source: International Association of Comprehensive Aesthetics)