Quality Resource Guide

Medical Emergencies: Preparation and Management

Author Acknowledgements

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Educational Objectives

Following this unit of instruction, the practitioner should be able to:

1. List the most common medical emergencies occurring in the dental setting.
2. List the four components in preparation of the dental office and staff to promptly and effectively recognize and manage medical emergencies.
3. Describe the dental office emergency team, outlining the job requirements for each member.
4. Discuss when to call for emergency assistance and whom to call.
5. List the two injectable drugs in the basic emergency kit and describe their clinical indications.
6. List the six non-injectable drugs in the basic emergency kit and describe their clinical indications.
7. List the recommended emergency equipment.
8. Describe the algorithm for the management of all medical emergencies.
9. List the three components of 'D' – definitive care.

MetLife designates this activity for **1.0 continuing education credits** for the review of this Quality Resource Guide and successful completion of the post test.

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The content of this Guide is subject to change as new scientific information becomes available.

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Introduction

Medical emergencies can and do happen in the practice of dentistry. Surveys of dentists in the United Kingdom[1-3] and USA.[4,5] demonstrate that, though rare, potentially life-threatening situations can be expected to occur in the dental office once every 2 to 4 years. **Table 1** lists the thirteen most common emergencies found in a survey of 4,309 dentists practicing in North America. These constituted 98.7% of the 30,608 emergencies reported.[4] **Table 2** lists the incidence of medical emergencies in an American Dental Association survey (N=529) of dental offices in the 12 months prior to March, 2018.[5]

Dental offices must be prepared to promptly recognize and effectively manage medical emergencies. Though no 'national standard' for emergency preparation exists in the USA, specialty groups, such as the American Association of Oral & Maxillofacial Surgeons,[6] the American Academy of Pediatric Dentistry,[7] and the American Association of Periodontists[8] have developed guidelines for their membership. The states of Massachusetts[9] and West Virginia[10] require all dentists practicing in the state to maintain a 'minimal' kit of emergency drugs and equipment in their office.

A medical emergency in the dental office environment may be defined as an event occurring to the patient in the chair that causes the doctor to stop 'doing' dentistry because they (the doctor) are now more concerned with the patient's life than the patient's teeth.

It is the obligation of the Healthcare Provider to the 'victim' of the medical emergency to try to keep the victim alive until (1) they recover or (2) help arrives on scene to take over management, provided that they are better qualified to handle the situation.

Prevention

Prevention of an emergency is more desirable than managing it once it occurs. Approximately 75% of medical emergencies are preventable. Thorough evaluation of the medical history, recording vital signs, assessment of medical risk (ASA classification), and use of treatment modifications, as needed, can prevent 'stress-induced' emergencies.

Table 3 lists other Quality Resource Guides discussing dental management of higher-risk patients.

Preparation

Preparation of the dental office and staff to recognize and manage medical emergencies is essential to a successful outcome. **Table 4** is an example for an office preparation plan listing the components involved in adequate preparation. Each dental office should develop their own detailed and specific plan fitting their circumstances.

1. Basic Life Support

Without doubt basic life support (BLS) is THE single most important element in successful management of any medical emergency. Though not all state dental boards mandate BLS (also known as 'CPR') to maintain dental licensure, the drug package insert accompanying all local anesthetic drugs states:[11]

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

Resuscitative equipment has been interpreted in courts to be the ability to perform BLS. Training in the use of all resuscitative equipment is essential for proper utilization. BLS Healthcare Provider (BLS-HCP) is the minimum level of training required. Though states mandating current-BLS cards for dental licensure require successfully completing a course every 2 years, multiple studies have demonstrated a significant decrease in technical prowess after as little as 6 months.[12,13] It is strongly suggested that BLS-HCP retraining be done at least annually.

Table 1 - Reported Medical Emergencies

Situation	# Reported
Synope	15,407
Mild allergic reaction	2,583
Angina pectoris	2,552
Postural hypotension	2,475
Seizures	1,595
Asthmatic attack (bronchospasm)	1,392
Hyperventilation	1,326
Epinephrine reaction	913
Insulin shock (hypoglycemia)	890
Cardiac arrest	331
Anaphylactic reaction	304
Myocardial infarction	289
Local anesthetic overdose	204

Table 2 - Incidence of Medical Emergencies within previous 12 months[5] (N=529)

Emergency Situation	% Reporting
Synope	37.77
Epinephrine reaction	37.43
Postural hypotension	33.92
Mild/moderate allergic reaction	15.79
Physical injury requiring first aid	15.20
Hyperventilation	11.70
Seizure	11.11
Other, please specify	5.85
Insulin shock (hypoglycemia)	2.92
Asthmatic attack (bronchospasm)	1.75
Local anesthetic overdose	1.17
Angina pectoris	1.17
Anaphylactic reaction	0.58
Cardiac arrest	0.58

Table 3 - Recommended Quality Resource Guides

Antibiotic Use in Dentistry - Arthur H. Jeske, DMD, PhD

Contemporary Local Anesthetics in Dental Practice - Stanley F. Malamed, DDS

Dental Care for Patients with Bleeding Disorders - Michaell A, Huber, DDS

Dental Care for Pregnant and Nursing Patients - Michaell A, Huber, DDS

Geriatric Dentistry: A Total Patient Approach - Tam Van, DDS

Management of Patients with Cardiovascular Conditions Encountered in Dental Practice - Frank C. Nichols, DDS PhD

Management of Patients with Some Common Medical Conditions Encountered in Dental Practice - Frank C. Nichols, DDS PhD

Management of the Anxious, Fearful or Phobic Dental Patient - Brian M. Lange, PhD

Medical Health History in Dental Practice - Bernadette Alvear Fa, DDS CPT

Screening and Monitoring Blood Pressure in Dental Practice - Vidya Sankar, DMD, MHS

Table 4 - Preparation of the Dental Office and Staff for Medical Emergencies

BASIC LIFE SUPPORT

- Annually, taken IN the dental office
- BLS for Healthcare Providers and for ALL dental office employees
- Trained to ventilate mouth-to-mask, NOT mouth-to-mouth

DENTAL OFFICE EMERGENCY TEAM

Member #1

First on scene of emergency
Stay with victim; yell for "HELP"
Administer BLS, as needed

Member #2

On hearing call for "HELP" ...obtains and brings to site of emergency:
(1) emergency drug kit
(2) portable 0_2 cylinder
(3) AED

Member #3, #4 and on...

Assigned ancillary tasks such as:
Monitoring vital signs (BP, heart rate and rhythm)
Assist with BLS
Activte EMS (Emergency Medical Services / 9.1.1)
Keep elevator available in lobby while awaiting arrival of EMS
Prepare emergency drugs for administration
Keep written timeline record during emergency

ACTIVATION OF EMS

When: As soon as YOU, the doctor, think it is necessary. For example: (1) unable to make a diagnosis; (2) know the diagnosis but are uncomfortable with it (*e.g.,* cardiac arrest); and (3) whenever YOU think EMS is warranted.

DO NOT HESITATE TO ACTIVATE EMS, if you feel it is needed.

Whom to call: 9.1.1., and a nearby physician or dentist IF you know beforehand that they are well trained in the management of emergency situations.

EMERGENCY DRUGS AND EQUIPMENT

See **Tables 5** and **6**

Where BLS is mandated, it is often required only of the doctor, perhaps the dental hygienist and, more rarely, the assistant. From a practical perspective, emergencies can happen to anyone, anytime, anywhere. In the surveys cited above,[1-5] a number of medical emergencies developed in dental office personnel, including the doctor. Realistically, BLS-HCP training should be included in the job description of *all* dental office personnel.

As we are preparing ourselves to manage emergency situations in the dental office, it is strongly suggested that BLS-HCP courses be taken IN YOUR DENTAL OFFICE placing the mannequin in dental 'situations,' such as in the dental chair and on the floor in the reception room.

All staff members should be trained to ventilate using a mask. 'B' [breathing] in BLS has always been the step rescuers are most reluctant to perform, especially when the victim is a stranger. Regurgitation commonly occurs in the unconscious victim. Additionally, it the victim is undergoing dental treatment, it is likely that their mouth will contain blood, pus, or other debris associated with that treatment. The ability to ventilate with a mask (barrier device) enables the rescuer to deliver oxygen to the victim (1) mouth-to-mask [16% O_2]; (2) bag-valve mask device [21% O_2]; or (3) with positive pressure O_2 [100% O_2] (though positive pressure O_2 is no longer as highly recommended due to the risk of overventilation of the victim).

Chest compression, if needed, CAN be effectively performed with the victim still in the dental chair. Lepere[14] demonstrated, and others have confirmed,[15,16] that the conventional dental chair provides firm support for the spinal cord, enabling sufficient blood volume to be circulated during chest compression.

Training in use of the automated external defibrillator (AED) is an essential component of the BLS-HCP course. When available in a dental office – as it should be in all dental offices – its use should be reviewed periodically by all staff members. Lay- person BLS has, in certain specific instances, been modified so as to eliminate ventilation. Compression-only CPR is taught in these situations. It is important to remember that as Healthcare Providers the dental office staff is STILL OBLIGATED TO BE ABLE TO VENTILATE AN APNEIC VICTIM.

2. Dental Office Emergency Team

When an emergency arises all office personnel should be able to respond rapidly and efficiently. This mandates the existence of a predetermined plan describing each person's function. A simple plan is described:

Member #1 is the first person at the scene of the emergency. When the situation develops in the dental chair this might be the doctor, hygienist or assistant. Where the situation occurs in the reception area it is the 'front office' people who will respond first. Thus, the earlier recommendation that all office personnel be BLS-HCP trained.

Member #1 (1) remains with the victim; (2) administers BLS, as needed; and (3) activates the dental office emergency team (*e.g.,* Yells for help!).

Member #2 is assigned to immediately 'bring the stuff' to the site of the emergency. The oxygen cylinder, emergency drug kit, and AED are kept together in an easily accessible location (*e.g.,* near a telephone).

Member #3 is, in fact, all the remaining member(s) of the office staff. Possible duties include: activation of EMS; waiting outside for arrival of EMS and escorting them to the office; 'holding' the elevator in the lobby for EMS; monitoring vital signs; preparing emergency drugs for administration; keeping a written record of the event, including a time line and treatment (*e.g.,* 10:15 AM – EMS called; 10:21 EMS arrives in dental office); and assisting in BLS.

The dentist remains the team leader, the one legally responsible for the health and safety of the patient (*e.g.,* victim). Tasks may be delegated as long as the person performing the task is capable of doing it well under the dentist's supervision.

3. Summoning Assistance

Two questions: When? and Whom?

When to call for help: Emergency medical assistance should be sought as soon as the doctor (the person legally responsible for the patient) feels it is needed. This occurs (1) if diagnosis of the problem remains unknown; (2) when the diagnosis *IS* known but is disturbing to the doctor; and (3) at any time the doctor feels uncomfortable and wishes help.

Never hesitate to seek assistance in managing a medical emergency if you feel it is warranted.

Whom to call: Emergency Medical Services (EMS) are the first responders to life-threatening medical emergencies in your community. In all areas of North America 9.1.1. is the EMS number. EMS response times vary significantly from community to community. In almost all situations EMS arrival will occur within ten minutes.[17,18] Where response time is prolonged (*e.g.,* traffic or rural environment[18]) and the dental office is located in a 'medical-dental' complex there might be available another healthcare professional well trained in emergency management. It is this author's opinion that the Oral & Maxillofacial Surgeon or Dentist Anesthesiologist commonly meets that standard as they are usually trained in Advanced Cardiac Life Support and general anesthesia.

Once EMS arrive at the site of the emergency, they will take over its management. Primary duties of EMS are to (1) save the victim's life; (2) stabilize the victims' condition at the scene and (3) transport to the emergency department of a hospital for definitive care, if necessary.

4. Emergency Drugs and Equipment

Many, if not most, dentists admit they would be quite uncomfortable administering drugs during a medical emergency. Given, however, that the availability of emergency drugs is mandated (see local anesthetic package insert, above), it seems prudent to prepare an emergency drug kit consisting of drugs that are considered to be essential. Dentists should continue to seek continuing education to upgrade their knowledge and ability to safely and successfully employ emergency drugs.

The following drugs represent the 'bare bones basic' emergency kit. It contains eight drugs: two injectable and six non-injectable (**Table 5**).

Injectable drugs: **Epinephrine** 1:1,000 for patients weighing more than 30 kg (66 pounds) and/or 1:2,000 for patients weighing 15 kg to 30 kg (33 to 66 pounds) in a preloaded auto-injector syringe represents the most important drug in the emergency kit and, fortunately, probably the least likely to be used. The availability of two preloaded auto-injector epinephrine syringes is recommended. A histamine-blocker, such as **diphenhydramine HCl** (Benadryl®), 50 mg/mL, is the other injectable drug. It is recommended that the emergency kit contain 2 or 3 1-mL ampules of diphenhydramine.

Both injectable drugs are used in the management of allergic reactions, be they non-life-threatening (diphenhydramine) or life-threatening (anaphylaxis – epinephrine and diphenhydramine).

Non-injectable drugs: **Oxygen** (available in an "E" cylinder) can be administered during almost any emergency situation. An 'E' cylinder provides O_2 for approximately 30 minutes during ventilation of an unconscious, apneic adult. **Nitroglycerin**, a vasodilator, is used to manage the acute anginal episode. Recommended for the dental office is either the translingual spray (Nitrolingual Pumpspray®) or sublingual tablets (NitroStat®). The tablets are considerably less expensive than the spray and are therefore more commonly used in the management of anginal episodes. **Albuterol** is the preferred bronchodilator used to manage bronchospasm (acute asthmatic episode). Hypoglycemia (low blood sugar) is a common occurrence in dentistry. An **antihypoglycemic**, a source of sugar such as a tube of a glucose gel should be included in the emergency drug kit. Alternatively, 12-ounces of orange juice or soft drink (non-diet) can be used. **Aspirin**, preferably powdered (Goody's®; BC Powder®; Aspirin to Go®), is recommended in the prehospital management of 'suspected myocardial infarction' victims. A dose of 325 mg, dissolved in water, is administered as soon as one suspects a myocardial infarction might be occurring. Aspirin inhibits platelet aggregation thus minimizing the size of the blood clot developing during the 'heart attack.' The narcotic antagonist, **naloxone**, has been added to the basic emergency drug kit in response to the nationwide opioid epidemic.[19] Narcan® is administered by injection or as a nasal spray.

Equipment: (**Table 6**) **Oxygen delivery system**

Table 5 - Recommended Emergency Drugs

INJECTABLE					
Category	**Generic Drug**	**Proprietary Drug**	**Alternative**	**Quantity**	**Availability**
Allergy - anaphylaxis - ADULT > 30 kg (>66 lbs)	Epinephrine	Adrenalin	None	2 preloaded auto injector syringes	0.3 mg/syringe
Allergy - anaphylaxis - PEDIATRIC 15-30 kg (33-66 lbs)	Epinephrine	Adrenalin	None	2 preloaded auto injector syringes	0.15 mg/syringe
Allergy - histamine-blocker	Diphenhydramine	Benadryl®	Chlorphenirmine	3 x 1 mL ampultes	50 mg/mL
NON-INJECTABLE					
Category	**Generic Drug**	**Proprietary Drug**	**Alternative**	**Quantity**	**Availability**
Oxygen	Oxygen	Oxygen		1 "E" Cylinder	
Vasodilator	Nitroglycerin	NitroStat sublingual tablets	Nitrolingual Pumpspray®	1 bottle	0.4 mg
Bronchodilator	Albuterol	ProAir, Proventil, Ventolin	Metaproterenol	1 metered dose inhaler	
Antihypoglycemic	"Sugar"	Insta-Glucose gel	Orange juice; non-diet soft drink	1 tube	
Inhibitor of platelet aggregation	Aspirin, powdered	Goody's®, BC Powder®	None	2 packets	
Narcotic antagonist	Naloxone	Narcan nasal spray	None	1 nasal spray	4 mg

including a positive pressure mask and/ or a bag-valve-mask device with several sized face masks (pediatric, small- and large-adult). Also recommended is a pocket mask to aid in mouth-to-mask ventilation. An **automated external defibrillator (AED)** is considered an absolutely essential part of emergency preparedness as early defibrillation is THE most important intervention in successful resuscitation from cardiac arrest. Other equipment includes: syringes and needles for drug administration; suction and suction tips; tourniquets; and Magill intubation forceps (for easy retrieval of foreign objects from the posterior part of the oral cavity or the pharynx).

Recognition and Management

Prompt recognition and efficient management of a medical emergency are essential to a successful outcome.

Recognize the presence of a problem, discontinue dental treatment and institute emergency management as soon as the problem is noted.

Recognition is based upon presenting signs and symptoms (S&S) including altered consciousness, respiratory distress, and chest pain. If ever a patient reports any unusual S&S, immediately stop the dental procedure and seek to determine the cause of the situation and to manage it as efficaciously as possible.

The following algorithm represents the management sequence for *ALL* emergency situations: P → C→ A → B → D (**Figure 1**). This algorithm was introduced by the American Heart Association in October 2010, replacing its original P → A → B → C → D algorithm.[20] These guidelines have most recently been updated in 2020.[21]

Position the patient appropriately. If conscious, (*e.g.,* speaking, moving) the position of choice is whatever is most comfortable for them. Unconsciousness is defined as the lack of response to sensory stimulation (*e.g.,* verbal or physical stimulation). A decrease in blood flow to the brain (*e.g.,* low blood pressure) is, far and away, the most common cause of unconsciousness. All unconscious persons are placed, at least initially, into the supine position with their legs elevated slightly. The contemporary contoured dental chair is more than adequate. When the back of the dental chair is positioned parallel to the floor the feet will be slightly elevated, enabling the return of blood from the legs back to the heart and to the brain.

Circulation, **A**irway, and **B**reathing are assessed and implemented as needed. In the conscious victim who is able to speak C, A, and B are deemed to be 'adequate' (by virtue of the patient being conscious and capable of speaking). With loss of consciousness each step must be assessed individually. First, the carotid pulse is palpated – for not more than 10 seconds (C) and if absent, or if doubt exists as to the presence of a palpable pulse, (*e.g.* cardiac arrest), chest compressions are begun. Next, the airway (A) is assessed. In most unconscious persons, head-tilt chin – lift provides a patent airway. However, airway patency must still be assessed using the 'look', 'listen' and 'feel' technique (B) with two rescue breaths (*e.g.,* mouth-to-mask; bag-valve-mask) delivered in the absence of spontaneous respiratory efforts (*e.g.,* apnea). In the event of cardiac arrest, 30 chest compressions are followed by two ventilations. Four to five complete sequences are provided in approximately 2 minutes.[20,21]

The goal of the steps (P→C→A→B) described thus far is to ensure that the victim's brain and heart are receiving an adequate supply of blood containing oxygen and 'sugar', the fuels required by the cells of the body to maintain normal function.

Definitive care represents the final step of management. Components of definitive care include: **D**iagnosis, **D**rugs and **D**efibrillation. When possible, a diagnosis is made and treatment proceeds accordingly (examples of easily diagnosed problems include: asthma, hypoglycemia, and angina).

Drugs, other than oxygen (which may be administered in any emergency situation) are rarely needed. Notable exceptions are acute bronchospasm (asthma) and the acute anginal episode. In both cases the patient (who arrives in the office with a pre-existing history of asthma or angina) will (1) diagnose their problem; (2) have their own bronchodilator or vasodilator (*e.g.* nitroglycerin) available; (3) be able to medicate themselves and (4) tell the doctor when they require additional emergency assistance (EMS). In the highly unlikely event of cardiac arrest prompt defibrillation is essential.

Emergency medical services (EMS) should be summoned at any time it is felt necessary.

Space precludes in-depth discussion of management of specific emergencies. The interested reader is referred to textbooks such as Handbook of Medical Emergencies in the Dental Office.[22]

Conclusion

The legal obligation of the dentist managing a medical emergency is to "try to keep the victim alive until (1) they recover or (2) someone, better trained in emergency care, takes over management of the victim."

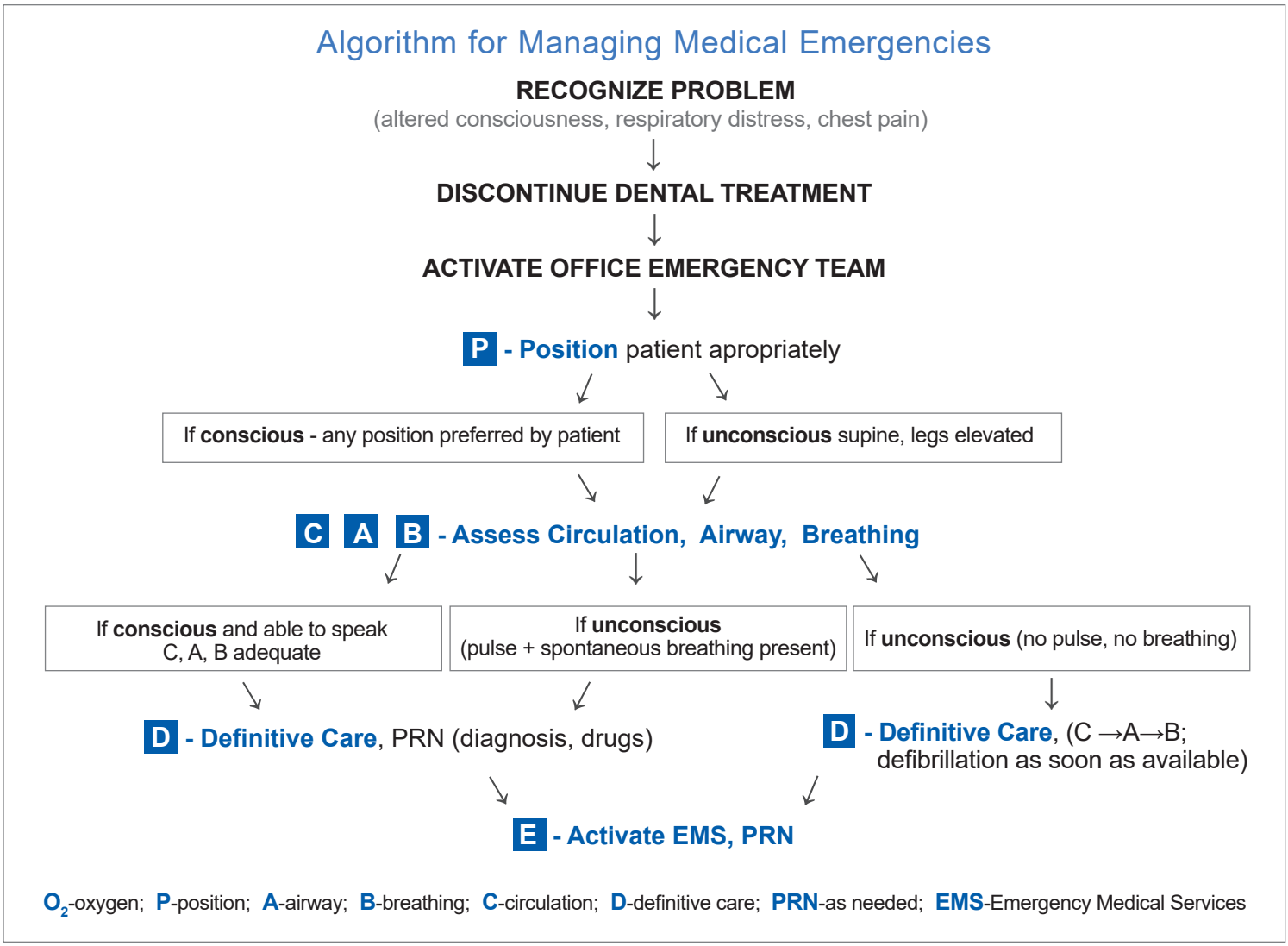
The ultimate goal for a dentist managing a medical emergency is to prevent the death of the victim, a goal achieved through office preparation, prompt recognition and effective management. In the most common dental office emergency, syncope (*e.g.,* 'fainting'), simply instituting the steps of BLS (P→C→A→B) leads to the prompt recovery of consciousness. Drugs are never the first line of management (except in anaphylaxis – an event highly unlikely to develop within the dental office environment). The management sequence introduced in the algorithm is adhered to in ALL emergency situations.

A superb, free, on-line resource is available to aid in the prevention, recognition and management of medical emergencies occurring in the dental office: "Ten Minutes Saves a Life" (from the Anesthesia Research Foundation) www.adsa-arf.org. It is also available from both the AppStore (ADSA Ten Minutes Saves a Life!) and Google Play (ADSA Ten Minutes Saves a Life! – Apps on Google Play).

Table 6 - Recommended Emergency Equipment

Equipment	Recommended	Alternative	Quantity
Oxygen delivery system	Positive pressure demand valve	O_2 delivery system with bag-valve-mask device	Minimum 1 large adult, 1 child
	Pocket mask		1 per employee
Automated electronic defibrillator (AED)	1	None	1 AED
Syringes for drug administration	Plastic disposable syringes with needles		3x2 mL syringes with needles for parenteral drug administration
Suction and suction tips	High volume suction	Non-electrical suction system	Office suction system
	Large-diameter, round-ended suction tips		Minimum 2
Tourniquets	Rubber or velcro tourniquet; rubber tubing	Sphygmomanometer	3 Tourniquets and 1 sphygomomanometer
Magill intubation forceps (for removal of foreign objects from airway)	Magill intubation forceps		1 Pediatric Magill intubation forceps

Figure 1



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POST-TEST

Internet Users: This page is intended to assist you in fast and accurate testing when completing the "Online Exam." We suggest reviewing the questions and then circling your answers on this page prior to completing the online exam.

(1.0 CE Credit Contact Hour) Please circle the correct answer. 70% equals passing grade.

1. **Which of the following is most likely to be encountered as a cause of unconsciousness in a 24-year-old male patient?**
   a. Adrenocorticosteroid deficiency
   b. Hypotension
   c. Hyperglycemia
   d. Syncope
   e. Cardiac arrest

2. **The very first step in management of a conscious patient experiencing respiratory distress is:**
   a. Placement in the most comfortable position
   b. Placement in the supine position with feet elevated slightly
   c. Administration of oxygen-enriched air
   d. Administration of an ammonia-vaporole
   e. Administration of 100% oxygen

3. **Emergency medical assistance should be sought:**
   a. only when the pulse is absent.
   b. when breathing is absent.
   c. whenever you, the doctor, feel it is warranted.
   d. as soon as possible in every medical emergency situation.

4. **The first step in managing a conscious patient experiencing chest 'pain' is:**
   a. administration of oxygen-enriched air.
   b. administration of 100% oxygen.
   c. placement in the most comfortable position.
   d. placement in the supine position with feet horizontal.
   e. placement in the supine position with feet elevated slightly.

5. **The single most important step in the management of all emergency situations, without exception, is?**
   a. Administration of oxygen
   b. Summoning EMS
   c. Administration of aromatic ammonia
   d. Basic Life Support, as needed
   e. None of the above
   .

6. **Which of the following emergency drugs may be administered to the "victim" of any and all medical emergencies?**
   a. Epinephrine
   b. Diphenhydramine
   c. Oxygen
   d. Nitroglycerin
   e. Albuterol

7. **Can effective chest compressions be applied with the victim lying in the dental chair?**
   a. Yes
   b. No

8. **In cardiac arrest, what ratio of chest compressions to rescue breaths is used for one-person resuscitation of the infant, child and adult victim?**
   a. 5 compressions: 1 ventilation
   b. 10 compressions: 1 ventilation
   c. 15 compressions: 2 ventilations
   d. 30 compressions: 2 ventilations
   e. 60 compressions: 2 ventilations

9. **The goals of Emergency Medical Services during a medical emergency are defined as follows:**
   a. Drug administration and oxygenation
   b. Chest compression and defibrillation
   c. Save the life, stabilize and transport, if needed
   d. Positioning and administration of CPR

10. **Which of the following represents THE most important drug in the emergency kit?**
    a. Epinephrine
    b. Aspirin
    c. Nitroglycerin
    d. Oxygen
    e. Albuterol
    .

Registration/Certification Information (Necessary for proper certification)

Name (Last, First, Middle Initial): _____

PLEASE PRINT CLEARLY

Street Address: _____ Suite/Apt. Number _____

City: _____ State: _____ Zip: _____

Telephone: _____ Fax: _____

Date of Birth: _____ Email: _____

State(s) of Licensure: _____ License Number(s): _____

Preferred Dentist Program ID Number: _____ ☐ Check Box If Not A PDP Member

AGD Mastership: ☐ Yes ☐ No

AGD Fellowship: ☐ Yes ☐ No Date: _____

Please Check One: ☐ General Practitioner ☐ Specialist ☐ Dental Hygienist ☐ Other

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Evaluation - Medical Emergencies: Preparation and Management 6th Edition

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Please respond to the statements below by checking the appropriate box, using the scale on the right.

	1 = POOR 1	2	3	4	5 = Excellent 5	
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2. How would you rate the quality of the content?	☐	☐	☐	☐	☐	
3. Please rate the effectiveness of the author.	☐	☐	☐	☐	☐	
4. Please rate the written materials and visual aids used.	☐	☐	☐	☐	☐	
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6. How relevant was the course material to your practice?	☐	☐	☐	☐	☐	
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8. The level to which your personal objectives were satisfied.	☐	☐	☐	☐	☐	
9. Please rate the administrative arrangements for this course.	☐	☐	☐	☐	☐	

10. How likely are you to recommend MetLife's CE program to a friend or colleague? *(please circle one number below:)*

10 **9** **8** **7** **6** **5** **4** **3** **2** **1** **0**

extremely likely — neutral — not likely at all

What is the primary reason for your 0-10 recommendation rating above?

11. Please identify future topics that you would like to see:

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