FDI POLICY STATEMENT

Basic Life Support (BLS) and Cardiopulmonary Resuscitation (CPR) in the Dental Practice

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CONTEXT

Effective basic life support (BLS) and cardiopulmonary resuscitation (CPR) techniques can save lives. As leaders of the dental team, dentists must ensure that they and their dental team are appropriately educated, well trained and certified in performing BLS with CPR in accordance with relevant national guidelines. It is recognized as best practice to have the appropriate training and equipment in place to allow the dental team to respond to all medical emergencies (ME) quickly and appropriately in their clinic.

SCOPE

Sudden cardiac arrest (CA) is one of the leading causes of death in most countries. (1) CA can occur everywhere, including in the dental clinic. Due to the possible poor outcomes while treating a CA, time is of the essence. Treatment requires a coordinated effort on the part of the dental team to effectively activate the “Chain of Survival”. (2) CPR training prepares dentists and other members of the dental team to provide rapid response to an unresponsive patient. When a person receives high quality CPR, the blood continues to flow through the heart and keeps the body oxygenated.

DEFINITIONS

Basic Life Support (BLS): type of care that first-responders, healthcare providers and public safety professionals provide to anyone experiencing cardiac arrest, respiratory distress or an obstructed airway. It requires knowledge and skills in cardiopulmonary resuscitation (CPR), using an automated external defibrillator (AED) and relieving airway obstructions in patients of any age. (3) Cardiopulmonary Resuscitation (CPR): life-saving procedure utilizing chest compressions and rescue breathing. The latest guidelines put more emphasis on chest compressions. It aims to keep blood and oxygen flowing through the body when a person’s heart and breathing have stopped.
Automated External Defibrillator (AED): a device that can detect abnormalities in a person’s heart rhythm and, if needed, deliver an electric shock to restore normal rhythm to the heart. This is known as defibrillation. An AED is an essential part of CPR. Using AED properly in conjunction with CPR can significantly increase a person’s chance of survival.

Cardiac Arrest (CA): occurs when the heart’s normal rhythm is disrupted and cannot generate blood flow to the body. When a person suffers from CA, brain damage, organ damage, and death occur in a few minutes.

**PRINCIPLES**

It is imperative for professional healthcare providers to be trained and ready to respond to an ME in the dental clinic. In the absence of local guidelines, dentists and members of the dental team should refer to the American Heart Association, the European Resuscitation Council or those of their regional or national member of the International Liaison Committee on Resuscitation.

**POLICY**

Preparing the dental clinic personnel to respond to a ME:

- Take complete medical history for each patient and update it regularly. Designate “at-risk” patients.
- Manage anxiety, fear and pain.
- If the dental practice has an AED, the whole dental team should have immediate access to it.
- Dental clinics should be encouraged to have an AED available
- Practice CPR and responses to MEs. The training sessions should be performed both in the dental operatory and waiting area. The whole team needs to be trained and updated in CPR and ME management. Dental teams that are confident in their BLS/CPR/ME skills will be less likely to hesitate in an emergency.
- Steps to activate the Chain of Survival include:
  - Survey the scene – make sure the surroundings are safe to help the person in need.
  - Early recognition – check for responsiveness and breathing while ensuring all Infectious Disease precautions are in place.
  - Activation of emergency medical services (EMS) personnel.
  - If the person is not breathing or insufficient breathing (agonal respiration) initiate CPR with 100 to 120 quality chest compressions per minute.
  - Check heart rhythm with an Automated External Defibrillator (AED) if available. The AED may instruct you to deliver an electric shock to the victim’s heart before continuing chest compressions.
  - Continue CPR in an adult as C-A-B (chest compressions, airway, breathing) 30:2 - Give 30 chest compressions followed by 2 rescue breaths. In children and infants, new guidelines stress airway management aiming for a rate of 20 to 30 breaths per minute when receiving CPR with advanced airway in place or rescue breathing.
KEYWORDS Dental practice, safety, Basic life support

DISCLAIMER
The information in this Policy Statement was based on the best scientific evidence available at the time. It may be interpreted to reflect prevailing cultural sensitivities and socio-economic constraints.

REFERENCES
