

## Cardiac Arrest and Cardiopulmonary Resuscitation

Prof. Eun Jung Kim

Cardiac arrest is a condition in which actual exudation from the heart is lost due to ventricular tachycardia, fibrillation, or anhydrous contraction, and as blood flow to the respiratory center is lost, immediate respiratory arrest and loss of consciousness are accompanied. If respiratory arrest precedes, respiratory arrest is caused by airway obstruction due to foreign substances or other causes, resulting in hypoxemia and reduced oxygen supply to the coronary artery, resulting in cardiac arrest. The importance of dentists' response to cardiac arrest and basic resuscitation is increasing due to the possibility of respiratory suppression due to sedation or foreign substances in the oral cavity and unexpected cardiac arrest due to an increase in the number of elderly patients.

Since cardiopulmonary resuscitation (CPR) based on scientific evidence is very important, the American Heart Association (AHA) and the National Academy of Sciences National Research Council first proposed guidelines for CPR and emergency heart treatment, and since then, the AHA basic guidelines have been announced in 2020.

The main changes in the 2020 Basic Life support guidelines were changed from recommending that the Basic Resuscitation Team perform resuscitation for up to 6 minutes and the Professional Resuscitation Team take the patient to the hospital for 10 minutes. In addition, it was changed to recommend back blows first rather than abdominal thrusts when closing the airway due to foreign substances, and after the COVID-19 pandemic, wearing appropriate personal protective equipment, including masks, gloves, long-sleeved gowns, and goggles, was also included. Other basic resuscitation procedures were maintained without major changes compared to previous guidelines, such as ① Assess unresponsiveness, ② Activation of the emergency response system (call 119 or broadcast), ③ Assess breathing and pulse, ④ Chest compression, ⑤ Airway maintenance and respiration, ⑥ Automated external defibrillator use.

### Profile

- \* Pusan National University, College of Medicine
- \* Pusan National University, School of Medicine, Master of Degree
- \* Pusan National University, School of Medicine, Doctor of Philosophy
- \* Pusan National University Hospital, Intern
- \* Pusan National University Yangsan Hospital, Department of Anesthesia and Pain Medicine Resident
- \* Pusan National University Yangsan Hospital, Department of Anesthesia and Pain Medicine, Clinical Fellow
- \* Pusan National University Dental Hospital, Department of Dental Anesthesia and Pain Medicine, Clinical professor
- \* Present) Pusan National University, School of Dentistry, Department of Dental Anesthesia and Pain Medicine, Assistant professor