

CHAPTER IV

DO NOT RUSH TO REPORT NEWS OF THE DEATH: LAZARUS PHENOMENON

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1.Introduction

Lazarus is a Gospel who returns from the dead by Jesus. Lazarus phenomenon, or autoresuscitation, is the spontaneous return of circulation (SROC) after failed cardiopulmonary resuscitation (CPR) efforts (1). The first case report was made in 1982 (2). In a study conducted in 2014, it was reported that the number of cases increased to 38 (3). We aimed to present the Lazarus phenomenon developing after CPR in a patient of chronic obstructive pulmonary disease (COPD).

2.Case

A 65-year-old male patient was admitted to the emergency department by ambulance due to COPD exacerbation. He was unconscious. No pulse was felt while the patient was on a stretcher. CPR was started immediately and effective chest compressions were achieved. Resuscitation protocols were applied to the patient. Every 3 minutes, 1 mg adrenaline was administered to the patient. Endotracheal intubation was performed. Oxygenation was started. Every 15 minutes, patient relatives were informed about the procedures. The pulseless electrical activity ended after 45 minutes CPR, asystole has occurred and CPR was terminated. The patient was considered dead. 5 minutes after the decision of death, her breathing effort was returned while we are preparing to say the patient's dead news. The nodal rhythm was seen again. The carotid and femoral pulse were palpated for 10 seconds. Then the patient were examined in detail. The patient's blood gas values were as follows; ph: 7.12, pCO₂:65 mmHg, pO₂: 40 mmHg. The patient was diagnosed with COPD exacerbation. The patient was connected to the mechanical ventilator. The treatment was started in the emergency room. Intravenous 120 mg methylprednisolone and 40 mg ulcuran were administered to the patient. Chest diseases consultation was requested. The patient was hospitalized in intensive care unit of chest diseases. Treatment of the patient was

continued in the intensive care unit of chest diseases. 2 days later, the patient became ex in intensive care unit.

3.Discussion

Although only a handful of such cases have appeared in the literature, there has been speculation that the Lazarus phenomenon occurs more often than those few reports would suggest (4). Various mechanisms have been suggested as explanations for the phenomenon. Bradbury (5) suggested delayed delivery to the heart of previously administered adrenaline as the basis for SROC in a patient after acute myocardial infarction and left ventricular failure. Voelckel and Kroesen (6) reported a case of suspected hyperkalemic cardiac arrest and hypothesized that SROC seven minutes after discontinuing the resuscitation was attributable to a gradual intracellular shift of potassium after previously administered bicarbonate. In our case, we don't know which mechanisms were occurred.

Hyperventilation, COPD, alkalosis, hyperkalemia, hypothermia, hypovolemia, delayed effects of drugs, minimal vital signs, such as unnoticed conditions cause the Lazarus phenomenon (7). In our case, the patient was a COPD patient and COPD was considered as the cause of the Lazarus phenomenon.

To diagnose death, there should be no consciousness and breathing, no pulse, no pupillary reflexes, and asystole should be seen on the monitor. With these findings, it is recommended to wait for another 5 minutes in order to be able to say the patient exitus as an exact exitus. As the hour of death, it should be recorded at the end of this 5-minute period (8). In our case, the patient had no breathing, circulation and pupil reflex. At electrocardiogram the patient was asystole. However, the patient's spontaneous circulation and breathing came back after 5 minutes close to reporting his death.

4.Conclusion

After 5 minutes of cardiorespiratory arrest, the pupillary response to light, the corneal reflex, and the motor response to supra-orbital pressure should be evaluated before the explanation of death to the patient's relatives.

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