Pulseless, Yet Still Conscious: A Case Report of Cardiopulmonary Resuscitation-induced Consciousness

Introduction

Cardiopulmonary resuscitation-induced consciousness (CPRIC) is the event where patient appears conscious with spontaneous movement during cardiopulmonary resuscitation (CPR). This phenomenon remains a challenge to the resuscitation team, due to paucity of consensus guidelines on the management. We present a case of CPRIC with return of spontaneous circulation (ROSC), with patient's recollection of the event.

Case Description

A 42-year-old lady with ischemic heart disease, complained of left-sided chest pain on the presenting day, associated with diaphoresis and dyspnoea. Diagnosis of acute anterolateral ST elevation myocardial infraction (Killip 4) was made based on ECG and physical examination. Medical thrombolysis was administered. She was noted gasping with ventricular fibrillation on cardiac monitor after 20 minutes of thrombolysis. Resuscitation was commenced as per Advanced Life Support (ALS) protocol. Throughout resuscitation, the patient had persistent purposeful movements and eyes opening, which abated upon cessation of chest compression. Intravenous midazolam 2mg was given to reduce her agitation and crashed intubation was successfully performed. ROSC was achieved after 24 minutes of CPR. The patient was stabilised and admitted to cardiac care unit. An interview regarding the recollection of the CPR event revealed that she was aware of the chest compression performed on her and voices around. This was followed by visual hallucination, where everything turned "white". She did not experience any pain. She was discharged without neurological deficit after six days of admission with cardiology follow up.

Discussion

CPRIC poses diagnostic dilemma during CPR, as it could be easily mistaken as ROSC. Besides, it may be distressing to healthcare providers to continue CPR on a "conscious" patient. These will lead to interruption of high-quality CPR, which reduce the chances of ROSC. Due to unfamiliarity with CPRIC, many do not aware of the need of chemical restraint via sedative agents. Midazolam and ketamine are amongst the recommended drugs according to the available guidelines and case reports.

Conclusion

Healthcare providers should be made aware of CPRIC. This topic should be considered as part of ALS curriculum in future. Besides, sedation is recommended during CPRIC to minimize interruption during resuscitation, thus optimising the chances of patient's survival.

Keywords

cardiopulmonary resuscitation (CPR), cardiopulmonary resuscitation-induced consciousness (CPRIC), sedative agent