

Abstract

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Rapid response team and out-of-hospital cardiac arrest

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Objectives:

In addition to its normal duties as a hospital emergency team, the RRT of the Clinical Hospital of the University of São Paulo School of Medicine (IHC-FMUSP), Brazil, also treats patients and guests that visit the clinics and the outdoor area surrounding the complex, which has a daily circulation of 18,000 people. The aim of the present report is to discuss the singularities of deploying a hospital RRT for OHCA assistance, using the experience of the IHC-FMUSP RRT to illustrate it.

Methods:

A retrospective descriptive analysis using the IHC-FMUSP RRT database was conducted. All cases classified as sudden CA treated outside of the hospital between 2014 and 2016 were retrieved. Data for the 5 survivors were analyzed in detail.

Results:

Of the 11 cases, 8 had ROSC at the scene (72.2%), and 3 died on site. Of the 8 patients admitted to the emergency department, 5 (45.5%) were discharged alive from the hospital, all with preserved neurological function (CPC scale 1). For these 5 survivors, the average response time was 3±1.2 minutes, and the call-to-shock time interval was 7.25±3.2 minutes. The CA rhythms included ventricular fibrillation (80%) and pulseless electrical activity (20%). Two patients were diagnosed with severe coronary disease and four received an implantable cardioverter-defibrillator device for secondary prophylaxis of sudden death. One patient among the five discharged, died in another unit.

Conclusions:

Although unusual, using a hospital RRT for OHCA assistance can be beneficial. The favorable outcomes likely resulted from team's training and rapid treatment. Cardiovascular evaluations of the survivors identified severe diseases, suggesting that these patients would most probably benefit from skilled care.