Cardiac Arrest on a Train

Information for facilitators

This teaching session is designed to be delivered by the roadside to a small group. It generally runs for 20 minutes followed by a debrief of approximately 20-25 minutes (40-45 mins total).

Aim

The aims of this session is to provide management to a post ROSC patient who is being extricated from a train and how to manage common complications of this group of patients.

What you will need

There are **THREE** components to this session:

Page 2 contains background information that can be read to the group and an expected sim progression.

Page 3 contains details of the scenario with expected progression for the sim technician.

Page 4 contains the checklist for facilitators to fill out during the scenario and a list of equipment required.

Introduction

"You are responding to a Category 1 call of a person in cardiac arrest on a train that has stopped at a nearby railway siding.

You are responding as an additional 'doctor' based resource to help with the ongoing management."

Expected Progression



Patient had a sudden collapse on the train. He was in cardiac arrest and had a total of 3x DC shocks for VF. He is intubated and ventilated.



He is starting to make some respiratory effort and coughing on the ETT. The crew are planning extrication from the train.



During extrication the patient will have a further episode of VF requiring a short period of CPR and a further DC shock.

Cardiac Arrest on a Train

PRU Sim 6

Case title	Cardiac arrest on a train		Sim no.	PRU 6	
Setting	Train Patient age	58	Patient sex	М	
Diagnosis	Post VF cardiac arrest STEMIC		Curriculum code		
Injuries	Anterolateral STEMI				
Staff required	1 x PRU Paramedic, 1 x PRU Doctor, 3 x Ambulance staff, RIO				
Learning objectives	 To gain familiarity with railway environment Understand extrication from trains Introduction to post ROSC management 				

INITIAL SETUP

Observations		Arrival route	N/A		
HR	110		E 1 V 1 M 1 = 3/15	Carers?	None
RR	12 (ventilated)	GCS		Visible external findings: None. Progression: During extrication the patient will have a further episode of VF requiring a short period of CPR and a further DC shock.	
SpO2	99%	Pupils	4mm		
ВР	112/45	Temp	36.7°C		
CRT	<2 secs				
Glucose	9.9	Weight	80 kg		
Equipment on arrival	Standard response bags	Additional info	Adult mannequin		

PRU Sim 6

DOMAIN	TASK	TIME	DONE
Preparation	Role allocations		
	Disposition discussions		
Initial Actions	Scene safety		
	Information gathering		
	Introductions to individuals on scene		
	Early update to control		
Assessment	A-E assessment		
	Identification of anterolateral STEMI		
	Required for rapid extrication		
Interventions	Consider paralysis/sedation		
	Consider 2nd IV access		
	Plan for ongoing ventilation		
	Defibrillation in a timely manner		
	Successfully lead extrication		
Decision-Making	Plan for extrication		
	Safety halt extrication to allow management of VF arrest		