### SHOCKABLE RHYTHM CARDIAC ARREST

### Learning objectives

|  |  |
| --- | --- |
| CRM | Division of roles  Closed-circuit communication |
| Topic | Recognition of degeneration in cardiac arrest  Execution algorithm Cardiac arrest with shockable rhythm |
| Skills | high CPR fraction  ECG Interpretation |

### Introduction

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| name | John Doe | Age | 55 | Weight  height | 85  1,73 |
| He arrives at the PS independently for an oppressive chest pain that has arisen in the last hour and that worries him greatly. He takes no medication. Ex-smoker. | | | | | |

### Setting the scene

|  |  |
| --- | --- |
| room | Shock room |
| Necessary equipment | Emergency trolley equipment,, O2 masks, tubes, ACLS drugs, laryngoscope |
| Make Up / mannequin’s Moulage | Cold sweat, suffering in his voice |
| Additional staff | fiancée? |
| Consultants' mobile phone number | to be evaluated |

### 

### Initial simulator setup

|  |  |  |
| --- | --- | --- |
|  | Tipe | Trauma Hal uomo |
|  | Posizion | Semi-sitting |
|  | Consciousness state | AVPU: A, GCS 15 |
|  | Airways | Pervie |
| eyes | | open |
| Breathing | |  |
|  | FR | 22 a/min |
|  | Breathing tipe | tachypnea |
|  | Chest expansion | Bilateral and symmetrical |
|  | % SpO2 | 98 in AA |
| Cardiovascular | |  |
|  | FC | 75 |
|  | Rhythm type | RS |
|  | PA | 170/100 mmHg |

ECG: diffuse hyperacute T-waves

### Setup ARREST

|  |  |  |
| --- | --- | --- |
|  | Consciousness state | AVPU: U |
|  | Airways | Pervie |
| Breathing | |  |
|  | FR | 0 |
|  | Breathing tipe | Gasping all’arresto |
|  | cyanosis | yes |
|  | % SpO2 | - |
| Cardiovascular | |  |
|  | FC | - |
|  | Rhythm type | FV |
|  | PA | 00/00 mmHg |

### Setup ROSC

|  |  |  |
| --- | --- | --- |
|  | Consciousness state | AVPU: P, the presence of a tube or IGEL is poorly tolerated, tends to have respiratory acts |
|  | Airways | secretions |
| eyes | | open |
| Breathing | |  |
|  | FR | 22 atti/min |
|  | Breathing tipe | tachypnea |
|  | Chest expansion | Bilateral and symmetrical |
|  | % SpO2 | 94 in o2 |
| Cardiovascular | |  |
|  | FC | 50, frequent BEV |
|  | Rhythm type | RS |
|  | PA | 70/30 mmHg |
|  | altro | EtCO2 45  ECG 12 anterior STEmi  ECO anteroseptal akinesia of left ventricle, lung with B line |

Running the simulation

They are called back by triage nurses to attend to the patient who has a less than frankly positive tracing but sees him in more pain and sweating than when he entered

- Multi-parameter monitoring and ECG trace analysis

- EEC request and peripheral venous access

- After monitoring and possible plaque position the patient goes into FV

- Recognition of FV and management according to cardiac arrest algorithm with shockable rhythm

- Rosc after III discharge

Intra-arrest pocus does not clearly suggest a cause

**Step Diagnosis**

Multi-parametric monitoring patient with chest pain

After monitoring the patient present an cardiac arrest whit FV , any diagnostic action they decide to perform before monitoring sends the patient into FV

Instructions for consultants

ECMO team: candidate patient, suggest getting Lucas and doing EGA

Reanimator: reports that he will arrive in a few minutes, but does not actually show up.

Cardiologist: busy in haemodynamics

Diagnostics available:

EEC will arrive in 1 hour

ECG post ROSC

EGA during arrest and post ROSC