SIMulatED RDH Emergency Department – Rebecca Day

# Scenario Run Sheet: RV infarct

## Learning Objectives

**Target Group: ED Registrars and Nurses**

**General:**

* **Crisis Resource Management**

**Scenario Specific**

* **ECG identification of RV infarct**
* **Treatment of RV infarcts**
* **ECG identification and treatment of symptomatic bradycardia (heart block)**
* **How to pace transcutaneously**

## Scenario Overview

**Brief Summary:**

**Cat 2 resus**

**A 63 year old male presents with 3 hour Hx of central chest pain (9/10) and diaphoresis. Significant risk factors. O/E: diaphoretic, looks unwell. HR50, BP105/60. Nil signs of heart failure.**

|  |  |  |  |
| --- | --- | --- | --- |
| Intro Time | Scenario Time | Debrief Time | Soundbite |
| 5 mins | **20mins** | **25mins** | **10mins** |

## Observers’ Engagement Task

## Equipment Checklist

|  |  |
| --- | --- |
| **Mannikin:** | Mannequin |
| **Monitoring:** | iSimulate |
| **Docs and Forms** | EDNA, Green sheet |
| **Equipment** | IV Pumps, Syringe Driver, |
| **Consumables** | Fluids, |
| **Medications** | Analgesics, GTN, antiplts, clexane, thrombolytics, atropine, adrenaline |

|  |  |
| --- | --- |
| **Sim Prompts** | CXR, 12 Lead, VBGs, Other: |
| **Sim Equipment** | Fluid receiver, Task trainer, Other: transcutaneous pacing equipment |
|  |  |

## Participants

**Staff**

2 resus nurses

2 doctors

## Additional Information/Medical History

**PMHx**

Smoker

Diabetic

HT

## Proposed Scenario Progression

* 2-3mins of preparation – receive ambo call late.
* Patient presents looking unwell, pale, diaphoretic, 9/10 chest pain, calling out for analgesia
* Hx and PMHx as above
* Presumably will get early ECG – inferior STEMI on ECG c/w inferior / RV infarct
* ?request right sided ECG
* Usual Rx – aspirin, clopidogrel, clexane, GTN/morphine, thrombolysis, consult cardiology immediately (?PCI option) – no PCI available
* If receives GTN -> BP drop to 75/40 (preload sensitive), responds to 250ml x2 fluid bolus (returns to 105/60)
* Once BP sorted with fluid loading -> patient goes into complete heart block – symptomatic/hypotensive -> needs Rx
* Atropine (unsuccessful/useless) -> adrenaline (unsuccessful) -> external pacing (successful)
* Ext pacing setup/sedation agents

## Scenario Preparation/Baseline Parameters

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Stage 1 (arrival – 5mins)** | Progression Trigger - GTN | **Stage 2 (next 5-10 mins)** | Progression Trigger – CHB/patient feeling lightheaded | **Stage 3 (next 5-10 mins)** |
| **RR** | 20 | 22 | 24 |
| **SpO2** | 98 RA | 98% RA | 98% RA |
| **HR/Rhythm** | 90 | 60 | 40 |
| **BP** | 105/60 | 75/40 | 70/40 |
| **T** | 36.5 | 36.5 | 36.7 |
| **Other** |  |  |  |
|  |  |  |  |

## Debriefing/Guided Reflection Overview

|  |  |
| --- | --- |
| **Opening Gambit** | **Anticipated themes:** |
| **Exploration with key players** |  |
| **Engaging the general group** |  |
| **Sharing facilitator’s thoughts** |  |
| **Any other questions or issues to discuss?** |  |
| **Summary** |  |

## The Soundbite

ECG criteria for RV infarcts

How to Rx RV infarcts

Approach to Rx symptomatic bradycardia

Pacing

General Feedback Prompts/Examples:

Opening Gambit:

* What did you feel were your specific challenges there?
* Let’s talk.
* Can you describe to me what was happening to the patient during that scenario?
* Can you describe to me what was going on?
* What was important to you in choosing to manage that situation?
* Can you tell me what your plan was and to what extent that went according to plan?
* That seemed to me to go smoothly, what was your impression?
* That looked pretty tough. Shall we see if we can work out together what was going on there so that you can find a way to avoid that situation in the future?

Exploration with key players

* Questions to deepen thinking
* Questions to widen conversation
* Introduce new concepts; challenge perceptions; listen and build
* So what you’re saying is…
* Can you expand on…
* Can you explain what you meant by…
* When you said…
* I noticed that you…

Engaging the general group

* Let’s check with the rest of the group how they reacted to you saying that.
* Did you [scenario participants/observers] feel the same?
* What did you [scenario participants/observers] want from [scenario participant] at that point?
* What ideas or suggestions has anyone else got for how to deal with that situation?

Sharing facilitator’s thoughts

* Use advocacy with inquiry to share your observations and explore their perception
* What does the protocol say on…..
* What do you think was happening ….?
* How do you think … would respond to…. ?
* What about next time…..?
* Do you think there’s anything to be gained from…?

Any other questions or issues to discuss?

Summary