SIMulatED RDH Emergency Department – Rebecca Day

# Scenario Run Sheet: GSW

## Learning Objectives

**Target Group: ED Registrars and Nurses +/- Trauma team members**

**General:**

* **Crisis Resource Management**

**Scenario Specific**

* **Preparation for arrival of a major trauma**
* **Trauma assessment - ATLS priciples**
* **Management of tension pneumothorax with finger thoracostomy followed by ICC**

## Scenario Overview

**Brief Summary:**

**A 23 year old male from Mount Bundy Military Station has been accidentally shot in the chest during a live ammunition training exercise. Flown to RDH by helicopter. Has a wound in the left subcostal area. Initially only mild resp distress and abdominal/chest pain. Initially haemodynamically stable but drops BP to 90/60 on transfer from stretcher to bed. Only has 1x IV access on Right ACF (tissues on arrival)**

**Ultimately has a moderate sized right haemopneumothorax with no clinical or radiological tension. Positive FAST and subsequent splenic lac on CT.**

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

## Observers’ Engagement Task

## Equipment Checklist

|  |  |
| --- | --- |
| **Mannikin:** | Mannequin |
| **Monitoring:** | iSimulate |
| **Docs and Forms** | EDNA, Green sheet |
| **Equipment** | IV Pumps, Syringe Driver, USS, |
| **Consumables** | Fluids, blood, MTP, |
| **Medications** | Analgesics, Lignocaine, |

|  |  |
| --- | --- |
| **Sim Prompts** | CXR, Other Xray, USS, 12 Lead, VBGs, Other: |
| **Sim Equipment** | Fluid receiver, Task trainer, Other: |
|  |  |

## Participants

**Staff**

3 nurses

3 doctors

Trauma nurse

**Instructor Roles**

## Additional Information/Medical History

**Demographics**

23 year old soldier – from Mt Bundy Station

**HPC**

Shot in abdomen/chest right sided 1 hr ago during live training exercise

**PMH**

Appendicetomy age 17

## Proposed Scenario Progression

* 5-10mins of pre-arrival prep to address space, team, equipment and drugs. White board MIST and equipment/drug documentation. Trauma page/Lead gowns etc
* Handover as per RDH standard = team assess and TL/scribe get handover at end of bed quietly. Recap of A-E and TL recaps the Hx/immediate management priorities
* Findings of small entry wound to left subcostal area
* On arrival relatively stable (obs as below)
* Lines x2 +/- RIC
* Bloods inc coags, Cross match x6,eFAST – Free fluid in RUQ and LUQ, CXR – Pneumothorax 2cm at hilum without clinical or radiological tension initially
* Given no head injury to consider hypotensive resuscitation
* Tranexamic Acid
* Consideration of whether to CT vs OT - surgeon wants to go to CT on way to OT which is likely not going to delay opening the abdomen as consultant surgeon is 10mins away from completing current op, patient is stable enough for CT
* Aline/IDC/CVC = only if no delay to OT/CT – can be done in OT
* As the team are preparing to put in a chest tube the patient drops BP and sats due to a tension. Needs to be decompressed with a finger thoracostomy urgently
* If finger thoracostomy not done then patient will arrest and remain in PEA until this is done

## Scenario Preparation/Baseline Parameters

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Stage 1 (arrival)** | Progression Trigger | **Stage 2 (5 mins post arrival)** | Progression Trigger | **Stage 3 (10 mins post arrival)** |
| **RR** | 24 | 32 | 36 |
| **SpO2** | 96 RA | 91% | 90% |
| **HR/Rhythm** | 110 | 120 | 120 |
| **BP** | 110/80 | 88/60 (MAP 66) | Depends on what given |
| **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

Permissive hypotension – the evidence for in penetrating trauma

When to do non-essential tasks e.g Aline/CVC/IDC

CRASH 2 trial

Finger thoracostomy vs needle decompression vs ICC

Management of splenic lacs

Code crimson

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