

# SIMULATION CASE PT-7

## Learning outcomes:

By the end of this simulation the candidates will:

- Apply the structured approach to trauma management
- Manage a patient with chest and facial injuries

**Simulation focus:** 12 cm laceration to right lower chest. Right lower lobe exposed. Right-sided pneumothorax. Laceration right middle lobe. Fractured 9th rib on right. Right facial fractures

**Timing:** 0-3 minutes: introduction; remaining time: split equally between simulation and debrief

## Introduction [Environment and Set]

Prior to the start of the simulation: one instructor to:

### 1. [Environment] Brief candidate group to *check the Environment:*

Room	Candidates to set up the room appropriately	
Equipment	Candidates to check required equipment present and accessible	

## Equipment list:

In addition to generic equipment list:

- Appropriate size manikin to be ready for simulation in room and covered until simulation commences

### 2. [Set] Give *History*

You have received a pre-alert from the non-paramedic crew bringing in an 11 year old boy who fell from a rope swing.

*Then leave the room for candidate group to prepare and after 2 minutes, return with instructor team and commence simulation*

## [Dialogue] Simulation

**Initial handover** *{to tell candidate on your arrival with the child as a non-Paramedic SBAR to Team Leader}*

<b>Situation</b>	11 year old who fell from a rope swing	
<b>Background</b>	An 11 year old boy was playing on a rope swing overhanging a steep muddy slope. The rope broke and he landed on a pile of branches lying at the bottom of the slope. When he arrives in hospital he is shivering and holding the right side of his chest. It is winter and he waited over an hour to be found.	
<b>Assessment</b>	A	Patent
	B	Rapid shallow breathing
	C	Complaining of chest pain; Pulse 100/min; CRT 5 secs
	D	Alert
	E	Laceration visible on chest; core temperature 33.5°C
<b>Recommendation</b>	Needs resuscitation and emergency management	

**Clinical course** *{to be given as the simulation progresses}*

The child becomes acutely dyspnoeic and oxygen saturations drop if the open pneumothorax is either completely occluded or is left open. His capillary refill improves after one fluid bolus and rewarming passively.

### Key treatment points



Preparation	Call Trauma Team		
	Briefing and allocation of roles		
Airway	Establish airway patency		
Breathing	Assess		
	High flow oxygen via face mask		
Circulation	Early IV access with wide-bore cannulae		
	Trauma bloods including blood for cross-match		
	Consider fluid bolus – blood or balanced crystalloid		
Specific therapy	Ported chest seal OR 3-sided dressing		
	Chest drain		
	Rewarming passively		
Handover to senior colleague	S		
	B		
	A		
	R		

## [Closure] Debrief

Using the learning conversation, carry out the debrief of both the technical and non-technical elements of the simulation.

The debrief will be for the team as a whole and should focus on some or all of the following:

- Technical skills in an A, B, C, D, E format and guided by the KTPs; in particular the safe and effective demonstration of all continuously assessed skills:
  - BLS
  - Defibrillation
  - Airway management
- Non-technical skills, including qualities of team membership and leadership:

Team members	<ul style="list-style-type: none"> <li>• Clear communication</li> <li>• Respect</li> <li>• Flexibility</li> <li>• Assertiveness</li> <li>• Ability to listen</li> </ul>
Team leaders	All of the above, plus <ul style="list-style-type: none"> <li>• Full overview of all aspects associated with child, parents and team</li> <li>• Prioritises according to KTPs</li> <li>• Summarises and re-evaluates</li> </ul>

- Feedback on Environment, where required

### Potential issues that may be raised for this specific simulation

- Hypothermia management

At the end of the debrief, give the opportunity for candidates to ask questions, answer these and then summarise the key points

### Assessment

Refer to the *Instructor guidance on simulations* document for a guide to the assessment of the simulation station. These assessments should be documented on the paper-based or electronic system for the final faculty meeting. Any scores of *serious concern* should be reported immediately to the course director.