

# SIMULATION CASE PT-1

## Learning outcomes:

By the end of this simulation the candidates will:

- Apply the structured approach to trauma management
- Manage a patient with significant head and neck trauma

**Simulation focus:** Head Injury with right parietal skull fracture and extradural haematoma. Fractured C3/4. Fractured right tibia and fibula

**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*

A 3 year old girl ran out in front of a car. It swerved, but still hit her. She fell to the ground unconscious and has not woken up since. She was taken to hospital by a passing taxi.

*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 Triage practitioner SBAR to Team Leader}*

<b>Situation</b>	Head injury	
<b>Background</b>	Unconscious, but initially responding to pain	
<b>Assessment</b>	A	Patent
	B	Gurgling when breathing. RR 20, SpO <sub>2</sub> is 98% in air
	C	Pulse 130, CR <2 seconds, BP 100/60
	D	Unresponsive
	E	Blood in hair and from right ear
<b>Recommendation</b>	Needs resuscitation	

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

Remains unconscious, when candidate checks the pupils the right is dilated. Movements of the neck result in hypotension and paralysis. Suction and insertion of an oropharyngeal airway are necessary to secure the airway.

### Key treatment points



Preparation	<b>Call : Trauma team</b>	
	Briefing and allocation of roles	
Airway	Establish airway patency	
	Protect cervical spine	
Breathing	Assess	
	High flow oxygen via face mask	
Circulation	Early IV access with wide-bore cannulae	
	Trauma bloods including blood for cross-match	
Specific therapy	Urgent CT after initial stabilisation	
	Urgent neurosurgical referral	
	Trauma imaging	
	Neuroprotective measures	
<b>Handover to appropriate Consultant / senior colleague</b>	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

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

### Discussion Points

- Tranexamic Acid would not be required to treat this patient as they are unresponsive with a GCS below 8.

### 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.