SIMulatED

Royal Darwin Hospital Emergency Department

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# Scenario Run Sheet: Paediatric Multitrauma

## Scenario Overview

**Estimated Scenario Run Time:**  12-15 mins

**Estimated Guided Reflection Time:** 25-30 mins

**Target Group:** ED Registrars and Nurses, SACU and Paediatric registrars

**Brief Summary:** 18 month old boy, crush injury to upper body after being backed over by car in driveway.

## Learning Objectives

**General**

Trauma team work, managing distressed parents, team member’s physical access to small child with multitrauma

**Scenario Specific**

Structured approach to primary and secondary assessment in small child

Age/weight-specific interventions to ABCDE including cervical spinal immobilisation, analgesia, fluid resuscitation, paediatric GCS calculation and prevention of hypothermia; collaborative approach with SACU/Paeds/ICU

## Equipment Checklist

**Equipment**

Broselow trolley, ICC, USS, syringe driver + infusion pump, NG tube, paediatric IDC

**Medications and Fluids**

Giving set, 0.9% saline, mannitol, O POS blood

**Documents and Forms**

ED nursing chart, trauma sheet, intubation checklist

**Diagnostics Available**

CXR – pneumothorax, PXR - NAD

VBG – Hb normal, mild respiratory acidosis and metabolic acidosis

## Scenario Preparation/Later Parameters

**Initial Estimated weight: 11kg Later**

GCS **10** (E2V4M4) RR 30 P 170 BP 85/50 GCS **3T** RR 30 HR 160 CR 2secs

Sats 90% RA T 37.2 BSL gas CR 4 secs SaO2 98% O2 BP 90/60 T 36.2

Pupils 4mm reactive then 2mm post fentanyl

**Mannequin Features**

Small child mannequin

## Participants

**Staff Actors**

ED Registrars x3 Mother Radiographer

Nurses x3ED, ED Consultant available by phone

Paeds registrar Paeds / ICU consultant referral by phone

**Instructor Roles**

- Provide the team with clinical signs, VBG, CXR

## Candidate Instructions/Triage Information

You are informed by the nurse TL that a Paediatric trauma call is due in 5 minutes. 18/12 boy backed over in driveway by family car, initially unresponsive. Spontaneous respiration 30 and HR 170 by SJA. Tyre marks over abdomen/chest, now occasionally crying spontaneously.

During primary survey: petechial rash to face, erythema/tyre marks chest and abdomen

## Patient Instructions

Mannequin voice – spontaneous irritable cry

**Medical History**: SVD at term, not yet had 18/12 vax, NKDA, no meds, no FHx

**Social** lives with parents and 2 older siblings

## Proposed Scenario Progression

* Trauma team performs primary survey including Broselow estimation of weight and EFAST.
* Establishes IV accessx2 and draws bloods including VBG
* Delivers early and appropriate doses IV fentanyl for weight/GCS.
* Allocates specific support person for parents and provides continues updates and reassurance
* Detects abnormal lung sliding on Left side and haemoperitoneum
* Undertakes early CXR/PXR – CXR confirms Left PTX and rib #s; PXR normal
* Team leader coordinates urgent interventions including decompression of PTx and plans for intubation and CT head to pelvis.
* Performs pre-intubation checklist and intubates child
* Peforms post intubation checks including ongoing sedation (M+M), OGT and CXR
* Prepares for transfer to CT

## Debriefing/Guided Reflection Overview

**General Opening Questions**

* How was the scenario? What happened?

**Scenario Specific Questions**

* What was wrong with the child? What complications were you concerned about?
* What impact did the presence of the parents have on patient care?
* Where does the child need to go next?

**General Wrap-Up Questions**

* What did you find most beneficial about this scenario?
* What was the most challenging point in this scenario?
* What would you do differently next time?