SAFETY

simulation for medical practice

Traumatic Brain Injury (TBI)

Ludwig-Maximilians-University (LMU)

BODY INTERACT™
VIRTUAL PATIENTS

AUTHORS

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Summary

Scenario Description

Learning Target

Medical:
Management of a patient with suspected TBI (Traumatic Brain Injury)

CRM:
- Leadership
- Decision Making
- Communication

Description

Where:
Emergency department

Frame conditions:
Day shift in the ED, all resources available

Participants

Students

Who:
1-2 doctors
1-2 nurses

Notes: Actor can portray parent

Scenario Briefing

Briefing (everyone)	Additional Briefing (individual Positions)	Case Briefing (Roleplayers)
5 yr old boy, playing in tree house, fell to the ground. Not witnessed, initial loss of consciousness unclear. In a panic, parents took him directly to the ED. He is awake, cephalgic and has vomited twice already in the car.		Parents – nervous, but helpful. Can be sent away

Notes:

Script SIM Nurse/Co-Instructor

List of Material	Set-Up Room	Set-Up Simulator
• normal ED cart • pediatric simulator (eg Laerdal SimJunior, 5year Gaumard) AND (optional) SP	Emergency stretcher with sim	Normally dressed (playground), no IV, bruise on forehead

Notes:

Scenario Saver

How to react if the medical problem is not identified	How to react if the medical problem is identified too quickly	Other comments, material needed for savers (e.g. white coat)
Parent can say something along the lines that little Max is very quiet and strange. If unclear how to manage – send senior in.	Difficult to impossible iv; io is an option	

Notes:

Scenario End Criteria

Scenario ends when…		
• stiffneck applied • iv or io access is established • anisocoria – intubation (depending on students level)		

Notes: Don't let the patient die!
General note – end the scenario saying:
"The patient is now going to be taken care of, thank you for solving the case"

Simulator Set-Up, Steering

	Phase 1 Start	Phase 2 Deterioration	Phase 3 Intubation	
Vitals	HR: 120 bpm, SR BP: 100/70 mmHg; SpO2: 98 %, Resp. Rate: 24 Temp: 36,9°C; GCS 15 Pupils: anisocoric, light reaction is normal.	HR: 85 /min. BP: 150/95, SpO2: decreasing over 1-2 min to 87% RR: 12 GCS 9 (moaning, eyes closed, pain withdrawal)	HR: 70 /min. BP: 95/60 SpO2: 99% RR: ventilated	
Text for patient	Complain about headache	Moaning		
Other info	Parents worried, but controllable			
Management during scenario				

Notes:

Abstract

Learning Target:	Management of TBI
Description:	TBI in a child
Participants:	- 1-2 doctors - 1-2 nurses
Case Briefing:	5 yr old boy, playing in tree house, fell to the ground. Not witnessed, initial loss of consciousness unclear. In a panic, parents took him directly to the ED. He is awake, cephalgic and has vomited twice already in the car.
List of Material:	Normal ED cart
Set-Up Room	ED stretcher with sim - pediatric simulator (eg Laerdal SimJunior, 5year Gaumard) AND (optional) - SP
Set-Up Simulator:	- normally dressed (playground) - no iv - bruise on forehead
Scenario Saver:	- parent can say something along the lines that little Max is very quiet and strange - if unclear how to manage – send senior in-
Scenario End Criteria:	- stiffneck applied - iv or io access is established - anisocoria – intubation (depending on students level)
Management during Scenario:	Parents worried, but controllable
Other:	