

# COMMON STRUCTURE FOR HIGH FIDELITY SIMULATION SCENARIO

## SCENARIO TITLE

**Management of a patient with SCD (Sickle Cell Disease) in vaso-occlusive crisis**

## SCENARIO OVERVIEW

DUMMY TYPE:

HEALTHCARE SERVICE: Emergency service reception

TARGET GROUP<sup>1</sup>: 2 nurse students, 1 nurse, 1 intern student (medicine student who can prescribe drugs)

ESTIMATED SCENARIO DURATION: 15 minutes

SCENARIO SUMMARY<sup>2</sup>: Initial care of a sickle cell patient in a vaso-occlusive crisis as soon as he arrives at the emergency department. Treatment of pain.

## EDUCATIONAL OBJECTIVES

GENERAL OBJECTIVES: Treatment of a hyperalgetic patient on arrival at the emergency service

SCENARIO-SPECIFIC OBJECTIVES: to be determined

## PARTICIPANTS' ROLE

STUDENT: 1	<b>Nurse student at the emergency service reception</b>	<b>Nurse student at the emergency service reception</b>	
PROFESSIONAL: 1	<b>Nurse in the emergency service</b>		
TRAINERS <sup>3</sup>	Nurse	<b>Nurse</b>	<b>Intern</b>

<sup>1</sup> Skill level and number of participants

<sup>2</sup> Scenario key words

<sup>3</sup> Control of dummy setting / Debriefing/ Dummy voice/ Facilitator/ Disruptive element/ external stakeholder (phone speaker)

	- Piloting dummy and voice	<b>(facilitator)</b>  - <b>In case of material problem</b> - <b>debriefing</b>	
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## EQUIPMENT LIST<sup>4</sup>

Medical supplies:

- Circulation<sup>5</sup>:

Catheter

Catheter for perfusion IV (22G, 20G, 18G)

Tubes for blood test

Compresses

Pump body and transfer

Syringe for gazometry

Pump

Syringes 10cc

Syringes 50cc (screw tip)

Single tubing

Anti-reflux tubing (PCA)

PCA

Syringe driver

- Ventilation<sup>6</sup>:

Oxygen glasses

Oxygen bottles

Or Oxygen manometer

Simple mask

Kit for MEONO (**Mixing equimolar oxygen nitrous oxide**)

- Miscellaneous<sup>7</sup>:

Electric blanket

Tank for hot packs

Stethoscope

Gloves (S, M, L) (non-sterile)

Medicines and solutes:

Documents<sup>8</sup>:

Sorting sheets (of the sorting nurse) corresponding to the service

Recommendations EBN/EBM about the vaso-occlusive crisis

<sup>4</sup> Prefer Check-list for quick check-up

<sup>5</sup> Catheters, infusion lines, needles (IV, intraosseous, subcutaneous), blood collection tubes, **tourniquet...**

<sup>6</sup> Nasal cannulas, non-**rebreather masks**, **intubation supplies...**

<sup>7</sup> **Capillary glycaemia**, **urinary catheter**, **thermometer**, **stethoscope**, **gloves**, **hand sanitizer....**

<sup>8</sup> Patient medical file, transmission sheet, ECG, recommendation summary sheet

Accessories<sup>9</sup>:  
Pens, labels to identify the IV

Environment<sup>10</sup>: Wigs for dummies

## SCENARIO PREPARATION

SIMULATION TYPE:

DUMMY TYPE:

SIMULATOR PREPARATION:

- Setting: corresponding to initial state (cf. table)
- Positioning<sup>11</sup> : patient lying down
- Accessories<sup>12</sup>: no

ENVIRONMENT PREPARATION<sup>13</sup>: bed barrier and stretcher in high position

PREPARATION OF ADDITIONAL EXAMINATIONS<sup>14</sup>: no

PREPARATION OF STUDENTS/LEARNERS<sup>15</sup>: work clothes on

## BRIEFING

TIME:

SITUATION<sup>16</sup>:

DOCUMENTS<sup>17</sup>:

## PATIENT DATA<sup>18</sup>

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<sup>9</sup> Pen, phone, diagnostic penlight for pupils, work outfits (white coats...)

<sup>10</sup> Wig, basin, tissues with blood, patient's suitcase...

<sup>11</sup> Half sit-up, lying down

<sup>12</sup> Presence of oxygen, of a drip tube, already scoped...

<sup>13</sup> Raised bed rails, presence of patients belongings, tissues, needed information received  
(Displayed thermometer, glycaemia...)

<sup>14</sup> If foreseen in the scenario, prepare additional examinations to display (chest radiograph, blood test...)

<sup>15</sup> Preliminary analysis of documents if needed

<sup>16</sup> Location where the scenario takes place, information before entering the simulation room

<sup>17</sup> Document handed during the briefing/ care record, biological results, written transmissions ...

<sup>18</sup> Care record layout or if not necessary to the scenario, voice memo for the trainer

Surname:  
 Name:  
 Date of birth:  
 Allergies:  
 History:  
 Medical history:  
 Surgeries:  
 Ob/gyn:  
 Personal treatment:

Age:  
 Weight:  
 Height:  
 Gender:

FRAMES OF REFERENCE / EXPERTS RECOMMENDATIONS<sup>19</sup>

DEBRIEFING IDEAS

SCENARIO PROGRESS

Monitor setting	Patient dummy	Students' interventions (what we would like to see...)	Messages
Beginning time of scenario:			
Initial state:  AP: HR: RR: SpO <sub>2</sub> :  ECG curve <sup>20</sup> :  Clinical signs: - eyes <sup>21</sup> - pupils <sup>22</sup> - pulmonary auscultation	Symptoms, voice		

<sup>19</sup> Quoted sources, bibliography  
<sup>20</sup> Sinus, Fibrillation....  
<sup>21</sup> Open, half-closed, closed  
<sup>22</sup> Miosis, mydriasis, anisocoria, normal-reactive

<p>State 2:</p> <p>AP: HR: RR: SpO<sub>2</sub>:</p> <p>ECG curve:</p> <p>Clinical signs: - eyes<sup>23</sup> - pupils<sup>24</sup> - pulmonary auscultation</p>			
<p>State 3:</p> <p>AP: HR: RR: SpO<sub>2</sub>:</p> <p>ECG curve:</p> <p>Clinical signs: - eyes<sup>25</sup> - pupils<sup>26</sup> - pulmonary auscultation</p>			
<p>End time of scenario:</p>			

## SCENARIO EVALUATION

POSITIVE ASPECTS:

TO IMPROVE:

REALISM:

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<sup>23</sup> Open, half-closed, closed

<sup>24</sup> Miosis, mydriasis, anisocoria, normal-reactive

<sup>25</sup> Open, half-closed, closed

<sup>26</sup> Miosis, mydriasis, anisocoria, normal-reactive

USED PROTOCOLS:

PROTOCOLS TO IMPLEMENT: