***COMMON STRUCTURE FOR HIGH FIDELITY SIMULATION SCENARIO***

SCENARIO TITLE

Managing the apnoea of an infant intoxicated by methadone

SCENARIO OVERVIEW

DUMMY TYPE:

HEALTHCARE SERVICE: neuropediatrics room

TARGET GROUP[[1]](#footnote-1): 4 students in 4th year paediatrics and 4 professional neuropediatrics nurses from CHR-Citadelle Liège

ESTIMATED SCENARIO DURATION: 5 minutes

SCENARIO SUMMARY[[2]](#footnote-2):

Clémentine, 2 months, hospitalised at 16:00 in neuropediatrics because her mother found her pale in her bed and drinks less from her latest feeding bottle.

During anamnesis, the mother indicates that she thinks her partner may have given methadone to the baby, but she is not sure and does not know how much.

The paediatrician took a blood test (toxicology), a urine test, and puts a catheter on her left hand.

The baby is under cardiorespiratory monitoring and saturation.

It is 20:00 and CR monitoring signals apnoea only.

The scenario ends at 5 minutes or as soon as A and B are performed before 5 minutes.

EDUCATIONAL OBJECTIVES

GENERAL OBJECTIVES:

**The learners are able to:**

* Detect apnoea in an infant
* Perform paediatric CPR adapted to the problem.

SCENARIO-SPECIFIC OBJECTIVES:

**The learners are able to…**

PARTICIPANTS’ ROLE

|  |  |  |  |
| --- | --- | --- | --- |
| STUDENT: paediatrics  | 1st line:Enter the room |  |  |
| PROFESSIONAL: paediatric nurse from CHR neuropediatric room | 2nd line:Enter the room after a student’s call or on facilitator | Must have a mobile phone in their pocket before entering the room |  |
| TRAINERS[[3]](#footnote-3)Laurence and Sylvie | \*1 behind PC: LP\* 1 NS facilitator: SL – nurse colleague | Tell the nurse “I heard Clémentine’s monitoring, go check what’s happening” | Well explained to the students in briefing, who’s who!Role |

EQUIPMENT LIST[[4]](#footnote-4)

Medical supplies:

 **- Circulation**[[5]](#footnote-5):

Crash cart: clear out all adult supplies and add paediatric material (1 for ventilation, 1 for intubation, drugs (Narcan), 1 trocar syringe,…)

Side of the crash cart: 2 bin bags for aspiration tubes

 **- Ventilation**[[6]](#footnote-6):

Crash cart

 **- Miscellaneous**[[7]](#footnote-7):

Stethoscope, arterial pressure, saturator, ECG, thermometer, nappies, nappy changing pads, soap, washing mitts, towel, drinking bottle, hoisted aspiration system.

Crash cart in the debriefing room next to the computer table.

Take picture of the room.

Clear the room: leave an armchair, bed, and cover the work surface with a large white bedsheet and set the nappy changing pad and material (nappy, washing mitts…)

Visible ring (hoist)

**Medicines and solutes**: crash cart – narcan vial (1ml/0.4mg) + NaCL 0.9% 10ml

**Documents**[[8]](#footnote-8):

**Accessories**[[9]](#footnote-9): pupil lamp, mobile phone

**Environment**[[10]](#footnote-10):

SCENARIO PREPARATION

SIMULATION TYPE:

DUMMY TYPE:

SIMULATOR PREPARATION: Simbaby

 - **Setting**: “modification before start” \* tools – monitoring setting – paediatric monitoring – OK - \*tools – patient monitoring - \* modification basic settings (Time 0)

 - **Positioning**[[11]](#footnote-11): lying in bed in a body

 - **Accessories**[[12]](#footnote-12): CR electrodes – satu. captors – sealed catheter + raised bed bars (show during briefing how to lower them)

ENVIRONMENT PREPARATION[[13]](#footnote-13):

Monitoring, hoist + rinf, baby bed, suction system, armchair, covered cabinet.

Crash cart In the debriefing room next to the computers. PICTURE.

PREPARATION OF ADDITIONAL EXAMINATIONS[[14]](#footnote-14):

PREPARATION OF STUDENTS/LEARNERS[[15]](#footnote-15): wearing professional outfit

BRIEFING

TIME: 20h

SITUATION[[16]](#footnote-16):

DOCUMENTS[[17]](#footnote-17):

PATIENT DATA[[18]](#footnote-18)

Surname: Age:

Name: Weight:

Date of birth: Height:

Allergies: Gender:

History:

Medical history:

Surgeries:

Ob/gyn:

Personal treatment:

FRAMES OF REFERENCE / EXPERTS RECOMMENDATIONS[[19]](#footnote-19)

DEBRIEFING IDEAS

SCENARIO PROGRESS

|  |
| --- |
|  |
| **Monitor setting** | **Patient dummy** | **Students’ interventions****(what we would like to see…)** | **Messages** |
| **Beginning time of scenario:** |
| **Initial state:** T0Check satu. and ECGAP: 65/39HR: 78RR: 0SpO2: 78%ECG curve [[20]](#footnote-20): 78Clinical signs: - eyes[[21]](#footnote-21): closed - pupils[[22]](#footnote-22): miosis - pulmonary auscultation  **T5’** | Symptoms, voiceNo voiceNo breathing movementsCyanosis around the mouthHypotonicStop scenario………………………. | **The student:**A-B-C-D: evaluation* Stimulate
* A=clear respiratory tracts and position
* B=5 insufflations (no bag)
* Life signs restoration?

**The nurse:**Brings perfusion bagCalls internal reanimation ……………………………………………. | Monitoring analysisCall colleague’s help withoutA-BObserving life signs**Facilitator: if no call from student, bring in professional**………………………………………. |
| **End time of scenario:** |

SCENARIO EVALUATION

POSITIVE ASPECTS:

TO IMPROVE:

REALISM:

USED PROTOCOLS:

PROTOCOLS TO IMPLEMENT:

1. Skill level and number of participants [↑](#footnote-ref-1)
2. Scenario key words [↑](#footnote-ref-2)
3. Control of dummy setting / Debriefing/ Dummy voice/ Facilitator/ Disruptive element/ external stakeholder (phone speaker) [↑](#footnote-ref-3)
4. Prefer Check-list for quick check-up [↑](#footnote-ref-4)
5. Catheters, infusion lines, needles (IV, intraosseous, subcutaneous), blood collection tubes, tourniquet… [↑](#footnote-ref-5)
6. Nasal cannulas, non-rebreather masks, intubation supplies… [↑](#footnote-ref-6)
7. Capillary glycaemia, urinary catheter, thermometer, stethoscope, gloves, hand sanitizer…. [↑](#footnote-ref-7)
8. Patient medical file, transmission sheet, ECG, recommendation summary sheet [↑](#footnote-ref-8)
9. Pen, phone, diagnostic penlight for pupils, work outfits (white coats…) [↑](#footnote-ref-9)
10. Wig, basin, tissues with blood, patient’s suitcase… [↑](#footnote-ref-10)
11. Half sit-up, lying down [↑](#footnote-ref-11)
12. Presence of oxygen, of a drip tube, already scoped… [↑](#footnote-ref-12)
13. Raised bed rails, presence of patients belongings, tissues, needed information received

 (Displayed thermometer, glycaemia…) [↑](#footnote-ref-13)
14. If foreseen in the scenario, prepare additional examinations to display (chest radiograph, blood test…) [↑](#footnote-ref-14)
15. Preliminary analysis of documents if needed [↑](#footnote-ref-15)
16. Location where the scenario takes place, information before entering the simulation room [↑](#footnote-ref-16)
17. Document handed during the briefing/ care record, biological results, written transmissions … [↑](#footnote-ref-17)
18. Care record layout or if not necessary to the scenario, voice memo for the trainer [↑](#footnote-ref-18)
19. Quoted sources, bibliography [↑](#footnote-ref-19)
20. Sinus, Fibrillation.... [↑](#footnote-ref-20)
21. Open, half-closed, closed [↑](#footnote-ref-21)
22. Miosis, mydriasis, anisocoria, normal-reactive [↑](#footnote-ref-22)