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

SCENARIO TITLE

Blind Leadership

SCENARIO OVERVIEW

DUMMY TYPE:

HEALTHCARE SERVICE: Inpatient surgical unit

TARGET GROUP[[1]](#footnote-1): specialisation and master students

ESTIMATED SCENARIO DURATION: 15 minutes

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

The students are invited to solve, in group, the clinical condition of a patient in cardiac arrest caused by hypoglycaemia associated to extended fast. A student must take on leadership of the process, but will do so with a blindfold. The different participants will need orders from the leader to implement the actions.

EDUCATIONAL OBJECTIVES

GENERAL OBJECTIVES:

To establish a structured and efficient communication; to lead a team in SAV

SCENARIO-SPECIFIC OBJECTIVES:

* To identify the patient’s condition as critical, to obtain colleagues’ help and specialised help
* to take commands, assign functions and guarantee their implementation
* to establish efficient communication within the team
* to take appropriate decision, taking priorities into account

PARTICIPANTS’ ROLE

|  |  |  |  |
| --- | --- | --- | --- |
| STUDENT | 1 -leader | 3 –respond to request for help |  |
| PROFESSIONAL | 1 –doctor who answers the phone |  |  |
| TRAINERS[[3]](#footnote-3) | 1 –managing the case | 1 -debriefing |  |

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

Medical supplies:

 - Circulation[[5]](#footnote-5): vein catheter in position; needles, syringes, drip systems

 - Ventilation[[6]](#footnote-6): O2, vacuum, suction tubes, catheter and O2 masks, manual bag valve mask, stethoscope

 - Miscellaneous[[7]](#footnote-7): pupil lamp; glucometer

Medicines and solutes: SF and Ringer’s solution; glucose 20%, adrenalin, amiodarone

Documents[[8]](#footnote-8): patient’s file

Accessories[[9]](#footnote-9): phone, protection equipment

Environment[[10]](#footnote-10): general surgery infirmary; patient with surgical plaster on the abdomen, with bloodstains, abdominal drain with bloodstains.

SCENARIO PREPARATION

SIMULATION TYPE:

DUMMY TYPE:

SIMULATOR PREPARATION:

 - Setting: corresponding to initial state (cf. table)

 - Positioning[[11]](#footnote-11): patient lying, no breathing movements

 - Accessories[[12]](#footnote-12): raised bed bars

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

* infirmary environment;
* put a plaster on the abdomen with bloodstains;
* put an abdominal drainage bag with bloodstains;
* put a gastrostomy tube with remains

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

* if they ask for it, there is a radiograph of the thorax and one of the abdomen available – normal
* if they ask for it, there is the result of blood tests collected in the morning – normal

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

* protection equipment
* if you ask for specialised help, a doctor answers the phone and say that you have to guarantee SAV, following the algorithm, help unavailable now because they are busy with other emergency situations

BRIEFING

TIME: 16:30

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

The patient has undergone abdominal surgery (exploration laparotomy) two days ago. He has a plaster and a drain with bloodstains. His abdomen is distended and refers that the analgesics has little effect on pain.

He had a scanner 30 minutes ago to evaluate possible bowel obstruction. He arrived in the unit not long ago. He had analyses in the morning, and a thorax and abdomen radiograph. The results have not arrived yet.

**Challenge**: to exercise leadership with a blindfold.

The trainer leads the leader to the bedside and explains the rules: the leader must lead and guide the team. The scenario starts and the trainer says he hears a bell and, while arriving to the patient’s room, the other patient in the room says he does not answer anymore.

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

Read infirmary notes

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

Surname: Silva Age: 48

Name: João Manuel Weight: 75 kg

Date of birth: 4th of January Height: 1.70

Allergies: no known allergies Gender: M

History: no relevant history until current disease

Medical history: colon tumour diagnosed two months ago

Surgeries: no prior surgery

Ob/gyn:

Personal treatment: João Silva

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

* Follow SAV recommendations
* In 4H/4T evaluation you must suspect an allergy to the contrast agent and identify hypoglycaemia
* You must treat hypoglycaemia based on SAV recommendations
* Follow the “communication and leadership in emergency situations” protocol

DEBRIEFING IDEAS

* How communication is established
* How leadership goes
* How the leader handles the situation

SCENARIO PROGRESS

|  |
| --- |
|  |
| **Monitor setting** | **Patient dummy** | **Students’ interventions****(what we would like to see…)** | **Messages** |
| **Beginning time of scenario:** |
| **Initial state:**AP: HR:RR:SpO2:ECG curve [[20]](#footnote-20): pulseless SVT (PEA)Clinical signs: - eyes[[21]](#footnote-21): closed - pupils[[22]](#footnote-22): symmetrical, reactive, but with slow response - Pulmonary auscultation  : clear, bilateralGlycaemia – 15 mg/dl | Symptoms, voice | * Evaluate ABCDE
* Evaluate 4H and 4T
* Correct hypoglycaemia administering 20% glucose (40-60 ml)
 | The roommate patient says that Mr. João Silva was complaining and stopped talking (answering) |
| **State 2:**After correcting hypoglycaemiaAP: 100/60HR: 120RR: 12SpO2: 92ECG curve: SR (120)Clinical signs: - eyes[[23]](#footnote-23): closed - pupils[[24]](#footnote-24): symmetrical, reactive - pulmonary auscultation: clear, bilateralGlycaemia – 105 mg/dl  |   |  |  |
| **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)
23. Open, half-closed, closed [↑](#footnote-ref-23)
24. Miosis, mydriasis, anisocoria, normal-reactive [↑](#footnote-ref-24)