UNIVERSITY of CALIFORNIA · IRVINE
Medical Education Simulation Center

<<Scenario Name>>

Section 1: Demographics

Case Title:

Case Description & Diagnosis:

Author(s):

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Date(s) of Development:

Target Audience:

Specialties:

Section 2: Curricular Information

Educational Rationale:

Prerequisite Knowledge and Skills:

Required Knowledge Background

- Anatomy related to airway and breathing
- Progression of symptoms of high spinal
- Intubation techniques
- Oxygenation delivery methods
- Respiratory/droplet precautions
- Fluid and blood products administration
- ACLS

Required Background Skills

- Airway Assessment
- Emergency Airway Management
    - Bag Mask Ventilation
    - Proper use of oral and nasal airway
    - Performing bronchoscopy
    - Performing laryngoscopy
    - Perform suctioning

Advanced Cardiac Life Support Protocols

ACGME Milestones

<<insert here>>

Patient Care (PC)
Medical Knowledge (MK)
System-based Practice (SBP)
Practice-based Learning and Improvement (PBLI)
Professionalism (P)
Interpersonal and Communication Skills (ICS)

Learning Objectives:

- X
- X
- X
- **Demonstrate** proper “time-out” protocol prior to invasive procedure(s), based on University of California Irvine Medical Center time out policy/protocols, without error.

References used:

Section 3: Preparation

1. Simulator
    a. SimMan 3G
2. Machines –
    a. Anesthesia machine,
    b. Code Cart
3. Misc
    a. Monitors – Basic Anesthesia and Patient Monitors
    Will need to have A-line and CVP options

Supplies (list specific quantities, sizes, and brand)

1. Airway
    a. Adult nasal cannula
    b. Adult face mask
    c. Adult non-re-breather mask
    d. Purple Oral airway
    e. 26 Nasal airway
    f. 7.0 or 7.5 endotracheal tube with lubricant on end to simulate mucous
    g. Laryngoscope with size 3 MAC blade
    h. Adult BVM
2. Medications/infusions
    a. X
    b. X
    c. X
    d. X
3. Kits
    a. X
4. Misc
    a. x

Supporting Materials:

1. Images
    a. CXR
    b. ECHO
2. Labs
    a. ABG
    b. CBC
    c. Chemistry
    d. Cardiac Enzymes
3. Handouts
    a. None
4. Misc
    a. Use EKG generated from Laerdal software (if required)
    b. Ultrasound (not available)

CXR, ECG, ECHO, Labs (CBC, BMP, ABG), ultrasound not available. A-line, Central line

Standardized Actors/Roles: (indicate the actors or roles needed to successfully run the scenario; key actions required to elicit behavior; and how the role should be played-i.e. helpful, distracted, confrontational, etc.) Provide a script or typical questions and answers.

Time Duration

Set-up	15 minutes
Preparation	10 minutes
Simulation	15 minutes
Debrief	30 minutes

Section 4: Simulation Exercise

Information for Participant

Case Stem to be read to participants:
(.):

Additional information if asked (patient history, labs, physical findings, etc.):

Information for Facilitator/Simulator Operator Only

Initial presentation:

How the Scenario unfolds:

Critical Action Items:

Actual course of events and outcomes (for real patient cases):

Simulation Events Table

Minute (State)	**Participant action/ Trigger**	**Patient Status (Simulator response) & Operator Prompts**	**Monitor Display (Vital Signs)**
0:00 (Baseline)		Simulator voice: none Confederate script:	Rhythm: B/P: P: R: T: O2 sat:
0:00-1:00 (State 1)	Time-out	Simulator voice: none Confederate script:	Rhythm: B/P: P: R: T: O2 sat:
1:00-2:00 (State 2)	Induction	Simulator voice: none Confederate script:	Rhythm: B/P: P: R: T: O2 sat:
			Rhythm: B/P: P: R: T: O2 sat:

Section 5: Debriefing & Evaluation

Debriefing

Reactions

1. What Happened?
2. How did you feel about _____?

Understanding (advocacy/inquiry)

1. What were you thinking when _____ happened?
2. It looked to me that _____?
3. I felt that you _____?
4. I saw you do/use _____?
5. What led you down that road?
6. Has this happened in your practice, if so how was it addressed?
7. Now that you have completed this simulation, how will this (if any) change your practice?

Summary

1. What did you do well?
2. What could you have done better/differently? (+/▲)
3. Takeaway

Teaching Points

Pathophysiology/etiology	Corresponding Learning Objective
•	
•	
•	
•	
•	
•	
•	

Evaluation

- [X] Instructor Evaluation
- [ ] Performance Checklist
- [ ] BAT
- [ ] ANTS
- [ ] Pre-Test
- [ ] Post-Test
- [ ] Team Evaluation

Section 6: Instructor's Notes

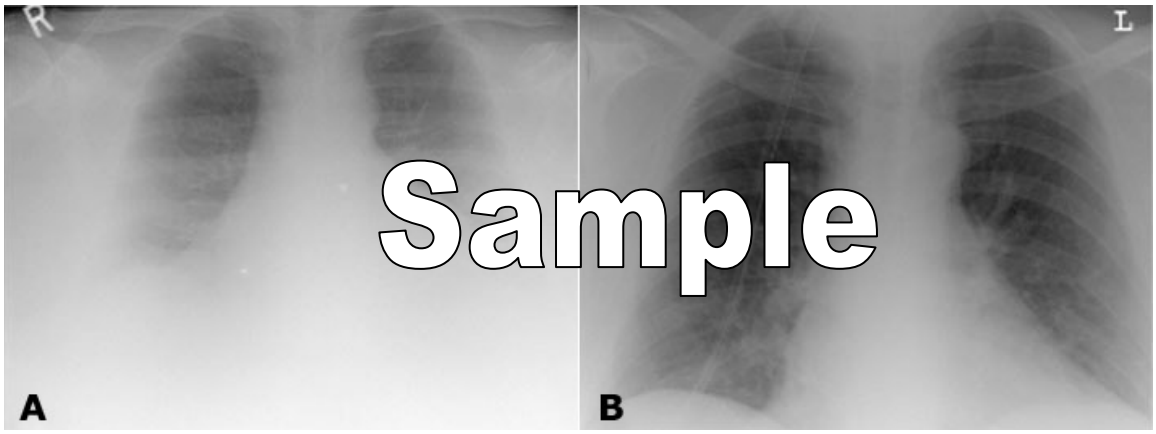
- Ensure the simulation environment is properly set-up (see section 3)
- Orientation (start of session) done in operating room
- Create a simulated OR environment

Briefing at start of session

1. Capabilities of simulator and simulation environment (done by simulation specialists)
2. Instructor the learner to call out all medications that are to be given and the associated dosages
3. Discussion of resources available
4. The learner should not assume there is a problem with the simulator
5. Establish a safe environment by explaining this is a training environment
6. Learner will sign both a consent and a video recording policy letter

Appendix A
Imagery File Descriptions

Chest X-ray



Just a CXR of obese male with poor penetration, and panel B is better penetration (if they ask for a new CXR)

Appendix B
Handout: Labs

CBC

WBC: 7.2 cells/uL
Hgb: 10.5 g/dL
Hct: 32%
Plt: 280,000 cells/uL

Chemistry

Na: 138 mEq/L
K: 4.1 mEq/L
Cl: 101 mmol/L
HC03: 25 mmol/L
BUN: 11 mg/dL
Cre: 1.1 mg/dL
Gluc: 122 mg/dL
CA: 10.1 mg/dL
Mg: 2.0 mg/dL
Phos: 3.1 mg/dL

Coagulation Panel

PT: 11 sec
PTT: 27.1 sec
INR: 1.1

UA (probably will not ask for this)

Prot: 78 mg/dL
Gluc: 89 mg/dL
Leuk: Neg
Nitrite: Neg
WBC: <2/hpf
RBC: 0/hpf
Bacteria:none

Cardiac Enzymes

Total CK: 51U/L (normal)
TropI: <.01 ng/mL (normal)
CK-MB: 3.4 ng/mL (normal)

Brain Naturietic Peptide (BNP)

2pg/mL

ABG

(if patient progresses to loss of consciousness/cardiac arrest)
pH 7.28
pCO2 44
pO2 85
HCO3 20
(if pt is resuscitated)
pH 7.38
pCO2 38
pO2 160
HCO3 23