

Postoperative: Anaphylaxis







Instructor Information

Patient Name: Garcia, Manuel

Simulation Developer(s): Melissa Brickner, Bridgett Everett, Debra A. Mosley, Beverly Snyder-Desalles,

and Judy Young
Scenario Purpose:

• Assist nursing staff with managing the care for the patient experiencing an anaphylaxis response **Learner(s)**:

- Registered Nurses (RN), Licensed Practical Nurses (LPN) (depending on facility protocols)
- Others as desired, depending on facility protocols
- Recommend no more than 6 learners (3 of which can be observers)

Time Requirements:

Setup: 5 minutesScenario: 25 minutesDebrief: 25 minutes

Reset/Breakdown: 5 minutes

Confederate(s):

Dr. Moore - Via telephone

- Seventy seven (77) year old male four (4) hours status post colon resection for removal of a sigmoid colon mass. He underwent a colon resection for a sigmoid mass removal 4 hours ago by Dr. Moore. He is on 2 liters of oxygen via nasal cannula. He has a midline abdominal incision with a dry sterile dressing. Bowel sounds are hypoactive. He has an 18 gauge IV in his right antecubital with Lactated Ringers infusing at 125 mL/hr. His Foley is draining clear yellow urine. The post anesthesia care unit nurse hung his first dose of ceftriaxone 2 G IV piggyback about 20 minutes ago. He's sleepy but easily arousable.
- The simulation begins when the learners are receiving report from the nurse

Patient Information:

- General: Sleepy but responds to verbal stimuli
 Weight/Height: 68.2kg (150lbs) 162.6cm (64in)
- Vital Signs: BP 98/58, Temp 97.3, HR 122, RR 26, O2 Sat 88%
- Pain: 5/10 abdominal incision
- **Neurological:** Sleepy but arousable
- Respiratory: Tachypneic with wheezing
- Cardiac: Sinus tachycardia
- **Gastrointestinal:** Bowel sounds hypoactive
- **Genitourinary:** Foley draining clear, yellow urine
- Musculoskeletal: Unremarkable
- Skin: Midline abdominal incision with a dry sterile dressing. Flushed with urticaria on face and trunk
- Past Medical History: Cataracts, constipation, hemorrhoids, sigmoid colon mass, and rectal bleeding
- Past Surgical History: Appendectomy and bilateral intraocular lens implants

Green Text Confederate

Red Text Physiology Change







Medications:

 Docusate Sodium 100mg one time daily

Allergies:

 No known drug allergies (NKDA)

Learning Objectives

Patient Name: Manuel Garcia

Simulation Developer(s): Melissa Brickner, Bridgett Everett, Debra A. Mosley, Beverly Snyder-Desalles,

and Judy Young
Scenario Purpose:

• Assist nursing staff with managing the care for the patient experiencing an anaphylaxis response

Pre-Session Activities:

Complete training on anaphylaxis

 Review policies and protocols on the management of care for the patient experiencing anaphylaxis

Potential Systems Explored:

- What facility specific policies or protocols exist for management of care for the patient experiencing anaphylaxis?
- What tools are available to prioritize the assessment and care of the patient experiencing anaphylaxis?
- What risk factors and complications are important to consider when caring for the experiencing anaphylaxis?
- What facility specific documentation is required when caring for the patient experiencing anaphylaxis?

Scenario Specific Learning Objectives (Knowledge, Skills, and Attitudes = K/S/A):

**The learner(s) will demonstrate ICARE principles throughout the scenario.

Learning Objective 1: Complete a focused assessment on a patient experiencing anaphylaxis

- a. K- Correlate urticaria, wheezing, and nausea with anaphylaxis
 - **S-** Utilize the DR ABCDE (Danger, Response, Airway, Breathing, Circulation, Disability, Exposure) approach to establish the greatest threat to life or per facility specific protocol
- b. K- Recognize changes in the patient's status
 - **S-** Re-assess the patient after treatment

Learning Objective 2: Perform the appropriate steps to manage care for the patient experiencing anaphylaxis

- a. **S-** Discontinue the antibiotic
- b. S- Position the patient to ease breathing
- c. S- Apply high flow oxygen
- d. S- Ensure the patient is on monitoring equipment
- e. S- Verify the orders
- f. **S-** Gather supplies
- g. **S-** Perform hand hygiene
- h. S- Perform patient education
- i. **S-** Perform rights of medication administration
- j. **S-** Administer epinephrine per protocol
- k. S- Dispose of needle in sharps container
- I. S- Administer normal saline 500 mL bolus
- m. S- Remove gloves
- n. **S-** Perform hand hygiene

Learning Objective 3: Communicate effectively when managing the care of the patient experiencing anaphylaxis

- a. S- Call for assistance
 - **A-** Demonstrate a sense of urgency while maintaining a sense of composure
- b. **S** Perform ISBAR communication







- c. **S** Provide patient education
- d. S- Initiate order to obtain lab specimens
- e. S- Complete required documentation

Debriefing Overview:

- Ask the learner(s) how they feel after the scenario
- Have the learner(s) provide a summary of the scenario from a healthcare provider/clinical reasoning point of view
- Discuss the scenario and ask the learners what the main issues were from their perspective
- Ask what was managed well and why.
- Ask what they would want to change and why.
- For areas requiring direct feedback, provide relevant knowledge by stating "I noticed you [behavior]..." Suggest the behavior they might want to portray next time and provide a rationale. "Can you share with us?"
- Indicate closing of the debriefing but provide learners with an opportunity to voice one or two take-aways that will help them in future practice
- Lastly, ask for any outstanding issues before closing the debrief

Critical Actions/Debriefing Points:

- 1. Call for assistance
- 2. Perform focused assessment utilizing the DR ABCDE approach
- 3. Discontinue the antibiotic
- 4. Position the patient to ease breathing and apply high flow oxygen
- 5. Apply high flow oxygen
- 6. Ensure the patient is on monitoring equipment
- 7. Correlate wheezing, urticaria, and nausea with anaphylaxis
- 8. Ensure the patient is on monitoring equipment
- 9. Provide healthcare provider with ISBAR communication
- 10. Verify orders
- 11. Perform rights of medication administration and administer epinephrine per protocol and dispose needle in sharps container
- 12. Administer 500 mL normal saline IV bolus
- 13. Recognize improvement in the patient's status
- 14. Remove gloves and perform hand hygiene
- 15. Complete facility specific documentation







Simulation Set-Up

Patient Name: Manuel Garcia (High Fidelity Mannequin)

Simulation Developer(s): Melissa Brickner, Bridgett Everett, Debra A. Mosley, Beverly Snyder-Desalles,

and Judy Young Room Set-up:

• Inpatient: Set up like an inpatient room

Patient Preparation:

- The patient is wearing a hospital gown
- Lactated Ringers at 125 mL per hour infusing in the right antecubital
- 100 mL piggy back labeled Ceftriaxone 2 G connected to primary tubing running at 200 mL/hr
- Oxygen 2 L nasal cannula
- Foley draining clear, yellow urine
- Midline abdominal dressing
- Moulage the skin for urticaria (hives)
- The leads to the monitor are on the patient
- Monitoring device (3 Wave form):
 - o ECG (Sinus Tachycardia), O2 Sat 88%, BP 98/58, Temperature 97.3, HR 122, RR 26
- Wheezing

Have the following equipment/supplies available:

- Gloves
- Oxygen source (tank or outlet)
- Oxygen delivery equipment (Bag valve mask (BVM), nasal cannula, simple mask, non-rebreather)
- IV catheter
- IV fluids (Lactated Ringers and 500 mL normal saline)
- Primary IV tubing (2 sets)
- Secondary IV tubing (1 set)
- Foley with drainage bag containing yellow urine
- IV pump(s)
- 2 syringes with needles to draw up epinephrine and administer or an Epinephrine Auto Injector
- Alcohol prep
- Sharps container
- Telephone
- Bedside table

Medications:

Epinephrine 1:1000 0.5mg or an Epinephrine Auto Injector

**Calibration will be required if using radiofrequency identification (RFID)

Note: 5.8 Simpad software update is required to load scenarios

(http://cdn.laerdal.com/downloads/f4343/simpad-upgrade.vs2 Scenarios may be used with Laerdal or LLEAP software

Scenario Supplements:

- Confederate scripts
- Confederate name tags
- Patient identification band
- Orders
- Medication label
- ZZ test patient/Demo patient in CPRS (if desired)







** Initial State:

- Mental Status: Sleepy but arousable
- SpO2: 88%
- BP: 98/58
- Temp: 97.3
- HR: 122
- RR: 26 Wheezing
- Pain: 5/10 abdominal incision with dressing
- Skin: Flushed with urticaria on face; trunk
- Abdomen: Hypoactive bowel sounds

<u>Did not...</u>

- ...discontinue antibiotic
- ...position the patient to ease breathing
- · ...apply oxygen
- ...ensure the patient is on the monitor
- Patient states "I feel like I can't breathe and like I am going to throw up."

** Status Change**

- Mental Status: Anxious
- SpO2: 85% (continue to drop if not noted)
- BP: 90/50 (continue to drop if not noted)
- Temp: 97.3
- HR: 132 (continue to increase and weaken pulse if not noted)
- RR: 30 Wheezing (stridor if not noted)
- Pain level: 5/10
- Skin: Flushed with urticaria on face; trunk

<u>Did not...</u>

- ...administer medication properly
- The patient will state "They didn't do it that way when this happened last time."

** Status Change**

- Mental Status: Calm
- SpO2: **94%**
- BP: **118/72**
- Temp: 98.1
- HR: 90
- RR: 16 Clear
- Pain level: 5/10 abdominal incision
- Skin: Pink

Flowchart

Seventy-seven (77) year old male four (4) hours status post colon resection for removal of a sigmoid colon mass. He is on 2 liters of oxygen via nasal cannula. He has a midline abdominal incision with a dry sterile dressing. Bowel sounds are hypoactive. He has an 18 gauge IV in his right antecubital with Lactated Ringers infusing at 125 mL/hr. His Foley is draining clear yellow urine. The post anesthesia care unit nurse hung his first dose of ceftriaxone 2 G IV piggyback about 20 minutes ago. He's sleepy but easily arousable."



- The patient states "I am itching all over and feel kind of nauseated. It's hard for me to breathe."
- Calls for assistance
- Performs focused assessment utilizing the DR ABCDE approach
- Discontinues the antibiotic
- Positions the patient to ease breathing
- Applies high flow oxygen
- Ensures the patient is on monitoring equipment
- Correlates wheezing, urticaria, and nausea with anaphylaxis
- The phone rings
- Dr. Moore states "This is Dr. Moore returning the call on Mr. Garcia."
- Provides Dr. Moore with ISBAR communication
- Dr. Moore states "I just entered orders for him and I'm on my way!"



- Verifies orders
- Gathers supplies
- Performs hand hygiene
- Performs patient education including side effects with urgency but with a controlled demeanor
- Performs rights of medication administration for medication administration
- Administers epinephrine per protocol (thigh is acceptable)
- Disposes of used needle in sharps container
- Administers normal saline 500 mL bolus
- Initiates order to obtain lab specimens

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- Re-assesses the patient
- Recognizes improvement in the patient's status
- Patient states "I feel so much better. Thank you!"
- Removes gloves
- Performs hand hygiene
- Completes facility specific documentation

Critical Actions/Debriefing Points:

- Call for assistance
- Perform focused assessment utilizing the DR ABCDE approach
- Discontinue the antibiotic
- Position the patient to ease breathing and apply high flow oxygen
- Apply high flow oxygen
- · Ensure the patient is on monitoring equipment
- Correlate wheezing, urticaria, and nausea with anaphylaxis
- Ensure the patient is on monitoring equipment
- Provide healthcare provider with ISBAR communication
- Verify orders
- Perform rights of medication administration and administer epinephrine per protocol and dispose needle in sharps container
- Administer 500 mL normal saline IV bolus
- Recognize improvement in the patient's status
- · Remove gloves and perform hand hygiene
- Complete facility specific documentation





Change in physiology

Red border incorrect action

Supplements

Confederate Scripts
Confederate Name Tags
Patient Identification Band
Nurses Notes
Orders
Medication Label







Confederate Scripts

Dr. Moore (Healthcare provider)

- The phone rings
- Dr. Moore states "This is Dr. Moore returning the call on Mr. Garcia."
- ISBAR will be provided
- Dr. Moore states "I just entered orders for him and I am on the way!"







Confederate Name Tags

Dr. Moore (Healthcare provider)

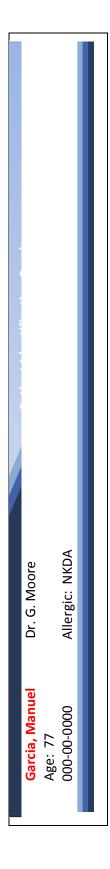
Simulations for (in Nursin







Patient Identification Band









Nurses Notes

Date: Today

Patient Name: Manuel Garcia

Mode of Arrival: Personally owned vehicle

Accompanied by: Family member

Insert picture of patient here

<u>Chief Complaint:</u> Seventy seven (77) year old male presents for surgical removal of sigmoid colon mass with colon resection

<u>Active Problems:</u> Lens implants, constipation, hemorrhoids, sigmoid colon mass, and rectal bleeding **Patient information:**

- **General:** Sleepy but responds to verbal stimuli
- Weight/Height: 68.2kg (150lbs) 162.6cm (64in)
- Vital Signs: BP 128/72, Temp 97.3, HR 85, RR 14, O2 Sat 95%
- **Pain:** 5/10 abdominal incision
- **Neurological:** Sleepy but arousable
- Respiratory: Clear, eupneic
- Cardiac: Sinus rhythm
- Gastrointestinal: Bowel sounds hypoactive
- Genitourinary: Foley draining clear, yellow urine
- Musculoskeletal: Unremarkable
- Skin: Midline abdominal incision with a dry sterile dressing
- Past Medical History: Cataracts, constipation, hemorrhoids, sigmoid colon mass, and rectal bleeding
- Past Surgical History: Appendectomy and bilateral intraocular lens implants

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SCREEN FOR ABUSE/NEGLECT: N/A

Does the patient show any evidence of abuse? No Does the patient feel safe in his/her current living arrangements? Yes Suicidal or Homicidal Ideation in the past two weeks? No

Is the patient currently enrolled in primary care? Yes

Diagnostic Procedures Ordered:

- () X-Ray
- () Labs
- () None
- () EKG
- () Head CT without contrast
- () Other

Triage Classification: Emergency Severity Index **Patient Disposition:** Medical-Surgical Unit

Signed by: /DM/







Medications:

 Docusate Sodium 100mg one time daily

Allergies:

 No known drug allergies (NKDA)

Orders

Patient Information

Garcia, Manuel

Dr. G. Moore

Age: 77

Social Security #: 000-00-0000

Allergies: NKDA

Weight: 68.2kg (150lbs) Height: 162.6cm (64in)

	neight. 102.0cm (04m)
STAT Orders	 Discontinue Ceftriaxone Epinephrine 0.5mg of 1:1000 solution or 0.3 mg Epinephrine auto-injector (if available in formulary) intramuscularly in outer thigh STAT Remain with the patient until rapid response team arrives 100% non-rebreather 500 mL normal saline IV bolus Mast cell tryptase level now Repeat mast cell tryptase level when stable Mast cell tryptase level in 24 hours
	Initiate anaphylaxis protocol

DO NOT WRITE IN THIS SPACE







Medication Label

Each vial contains: Ceftriaxone sodium USP powder equivalent to 2 g ceftriaxone.

For I.M. Administration: Reconstitute with 4.2 mL 1% Lidocaine Hydrochloride Injection (USP) or Sterile Water for Injection (USP). Each 1 mL of solution contains approximately 350 mg equivalent of ceftriaxone.

For I.V. Administration: Reconstitute with 19.2 mL of an I.V. diluent specified in the accompanying package insert. Each 1 mL solution contains approximately 100 mg equivalent of ceftriaxone. Withdraw entire contents and dilute to the desired concentration with the appropriate I.V. diluent.

USUAL DOSAGE: See package insert.

Storage Prior to Reconstitution: Store powder at 20° to 25°C (68° to 77°F) [see USP Controlled Room Temperature].

Protect From Light.

Storage After Reconstitution: See package insert.

Code No.: 78/MD/AP/96/F/B/R Made in India









References

- Department of Veterans Affairs. (2011). VHA national patient safety improvement handbook (VHA handbook 1050.01). Washington, DC: VHA Publications.
- Feyissa, G. T. (2013). Anaphylaxis: Assessment and management (adult),

 Recommended Practice. *JBI: Joanna Briggs Institute Database,* 1-3. Retrieved from http://ovidsp.uk.ovid.com
- Feyissa, G. T. (2015). Anaphylaxis: Management, Evidence Summary. *JBI: Joanna Briggs Institute Database*, 1-5. Retrieved from http://ovidsp.uk.ovid.com
- Simmons, F. E., Ardusso, L. R., Dimov, V., Ebisawa, M., El-Gamal, Y. M., Lockey, R. F.,...Worm, M. (2013). World Allergy Organization anaphylaxis guidelines: 2013 update of the evidence base. *International Archives of Allergy and Immunology,* 162, 193-204. doi:10.1159/000354543





