

*****FOR INSTRUCTORS & SIM OPERATORS ONLY*****

Scenario Synopsis	
Title: Obstetric Trauma Diagnosis: Pelvic trauma, hemorrhagic shock Patient Name, Age, Gender: Alicia Rodriguez, 30 y/o Hispanic female Chief Complaint: Motor vehicle collision at 60 mph, lower abdominal pain Target Audience: Interprofessional Simulation Team Prerequisite knowledge and skills: Team minimum requirements: 2 general surgeons, 1 nurse (not the confederate nurse), 1 anesthesiologist or emergency medicine physician, additional team members optional, resident trainees may be used Timing (minutes): Setup – 10; Scenario – 20 minutes max- no minimum time requirement; Debrief – will be given following submission of recording	Author Name: Rui-Min D. Mao, Clifford L. Snyder, Jennifer A. Calzada, Jong O. Lee Department, Institution: University of Texas Medical Branch; Tulane University School of Medicine Email: rdmao@utmb.edu Date created: 1/11/22
Learning Objectives, Observable Actions & Outcomes (Competencies/Milestones)	
1. Recognize and manage life-threatening injuries Observable Actions: 1.1 Action#1 A primary and secondary survey will be completed by team 1.2 Action#2 Manage resuscitation in a pregnant trauma patient 1.3 Action#3 Identify and manage airway compromise 1.4 Action#4 Prioritize diagnostic work-up of additional injuries	
2. The team will identify roles Observable Actions: 2.1 Action#1 Delegate /self-identify roles 2.2 Action#2 Team leadership easily identified 2.3 Action#3 Situation monitoring effectively completed	
3. Effective Communication Observable Actions: 3.1 Action# 1 Closed-Loop Communication 3.2 Action#2 Mutual support was observed 3.3 Action#3 Give effective hand-off of patient at conclusion of scenario	
Case Stem (Background Information to Give to Learner)	
You are called to a STAT trauma activation. A 30 year-old woman in the Emergency Department who presents via EMS s/p motor vehicle collision at 60mph as restrained driver. Patient c/o lower abdominal pain and right sided chest pain with unknown loss of consciousness	
Summary of Events	
Scenario progression sequence: 1. Patient alone in hospital bed, confused but responding appropriately 2. Patient shows signs of bleeding- tachycardic, borderline hypotensive, confused 3. Team should initiate resuscitation, perform primary and secondary surveys, identify likelihood of pregnancy – IV access, fluids, FAST exam 4. Patient decompensates due to hypovolemia – worsening hypotension, unresponsive 5. Team should obtain protected airway – intubate vs. advanced airway, CXR, ET CO2, C-spine precautions 6. Stabilization of hemodynamics and respiratory status with airway and transfusions 7. Team should prioritize additional diagnostic work-up and consultation of appropriate specialists- OB, orthopedics, CT scan	
Debriefing Questions	
Teams will receive debriefing following submission of recording to the ASE IPE Contest Team: rdmao@utmb.edu	
Actor Roles/Scripts	

Learners: Be themselves Play a specified role: Click or tap here to enter text.

Actors:

Embedded "confederate" nurse (played by sim staff): Assists to clarify details during the case, prompts team to give handoff at the end of competition of scenario

Scripts:

Once team transfers the patient (either to ICU, CT scanner, OR, or other) or if time runs out (20 minutes) please tell them that the scenario has ended and prompt the team leader to give a verbal handoff to the Surgical ICU team- which may be spoken out loud as if the ICU team is present over the phone.

****CAN BE GIVEN TO PARTICIPANT AT START OF SCENARIO OR ACCESSIBLE VIA EMR/COMPUTER****

Patient Information

Name: Alicia Rodriguez **Gender:** F **MRN:** 003880Z
Age: 30 years **DOB:** unknown **Race:** Hispanic
Height: 158 cm (62 in) **Weight:** 82 kg (180 lbs)

Chief complaint: *Motor vehicle collision*

History of Present Illness:

Motor vehicle collision at 60 mph as restrained driver with unknown loss of consciousness. Patient complaining of lower abdominal pain and right sided chest pain.

Past Medical History:

Unknown

Past Surgical History:

Unknown

Medications:

Unknown

Allergies:

Unknown

Family/Social History:

Unknown

Review Of Systems:

Unknown

Physical Examination:

Confused but responsive, GCS 13. Tachycardic with normal rhythm. Bilateral breath sounds present, with tenderness to palpation on right chest. Protuberant abdomen with ecchymosis across bilateral quadrants. Distal pulses intact.

Labs/Imaging Studies:

none

*****FOR INSTRUCTORS & SIM OPERATORS ONLY*****

Scenario Events Table		
Event State (Time)/Patient Vitals	Instructor/Operator/Actor Notes	Observable Actions/Learner Triggers
<u>Trauma Alert (2 minutes)</u>	Learners told in the trauma bay that there is a STAT trauma in route- 30 y/o female patient in motor vehicle collision	<ol style="list-style-type: none"> 1. Delegate /self-identify roles 2. Team leadership easily identified
<u>Initial Presentation (6 min)</u> ECG: sinus tachycardia HR: 120 BP: 100/60 T: 37 C (98.6 F) RR: 18 SpO2: 94 on RA PE findings: A- patent B- bilateral breath sounds clear to auscultation C- above vitals, distal pulses intact D- GCS 13 (E3V4M6), pupils equal 4mm and responsive Remainder of initial survey unremarkable Secondary: tenderness to palpation on right posterolateral chest, protuberant abdomen with ecchymosis across lower quadrants. Pelvic tenderness and instability. Small amount of vaginal bleeding. Multiple skin abrasions on extremities.	EMS handoff given overhead by control room: "30 year-old woman in the Emergency Department who presents via EMS s/p motor vehicle collision at 60 mph as restrained driver. Patient c/o lower abdominal pain and right sided chest pain with unknown loss of consciousness" If team does not recognize pregnancy during exam, say that patient's family member called in and informed that she is pregnant.	<ol style="list-style-type: none"> 1. Primary and secondary survey will be completed by team 2. Closed-Loop Communication 3. Mutual support observed 4. Identify likelihood of pregnancy and manage resuscitation accordingly <p>Voices Airway control including secures C-spine Obtain venous access Begin resuscitation with crystalloid bolus FAST exam CXR and pelvic XR Obtain basic labs (CBC, BMP, coags, fibrinogen, LFT's, COHb, type and cross, Rh status) O2 to keep sat > 95% to ensure adequate fetal oxygenation May need NGT to prevent aspiration</p> <p>Trigger to next state: Time elapsed (6 minutes) OR appropriate initial survey (primary and secondary)</p>
<u>Decompensation (4 min)</u> HR: 140 BP: 80/50 T: 37 C (98.6 F) RR: 10 SpO2: 90 and decreasing GSC is now 8 (E2V2M4) Labs, imaging studies: Labs pending, FAST exam: no fluid visible, fetal activity on pelvic view CXR: negative Pelvic XR: open book fracture Bilateral ABIs: 1.0	Notes: Patient becomes less responsive due to decompensation from hemorrhagic shock If asked for CT scan prior to volume resuscitation, say patient is too unstable to go to scanner.	<ol style="list-style-type: none"> 1. Closed-Loop Communication 2. Mutual support observed 3. Identify and manage airway collapse 4. Continue resuscitation for hypovolemic shock as appropriate for pregnant patient <p>Place wedge or blanket on right side to offload IVC while maintaining spinal precautions. Alternatively can displace uterus. Intubate patient for GCS 8 Apply pelvic binder Order blood transfusion – type and cross, request O- Check Rh status. Place arterial line Place Foley Avoid pressors Consult – OB Cardiotocography</p>

		<p>Avoid drugs contraindicated in pregnancy</p> <p>Trigger to next state: Time elapsed (4 minutes) OR appropriate volume resuscitation and workup for trauma</p>
<p><u>Resolution (8 min)</u> HR: 120 BP: 110/60 T: 37.5 C (98.6 F) RR: If intubated: per vent settings, otherwise 28 SpO2: 97 Labs, imaging studies: No new results- everything pending- FAST exam unchanged</p>	<p>If no disposition plans after 3 minutes, confederate nurse says, "What would you like to do with the patient?"</p> <p>At conclusion on case, confederate nurse says, "The ICU bed and team are ready, please give them a verbal sign out of the patient."</p>	<ol style="list-style-type: none"> 1. Prioritize diagnostic work-up of additional injuries 2. Give effective hand-off of patient at conclusion of scenario <p>Trigger for ending: Team requests to transfer patient to either the CT, ICU, or OR. SICU team arrives. Confederate nurse asks team to provide verbal hand-off to SICU. This ends the scenario.</p>

*****FOR INSTRUCTORS & SIM OPERATORS ONLY*****

Scenario Minimum Setup		
<p>Room Setting:</p> <input type="checkbox"/> Outpatient clinic <input checked="" type="checkbox"/> ER <input type="checkbox"/> ICU <input type="checkbox"/> OR <input type="checkbox"/> PACU <input type="checkbox"/> Ward <input type="checkbox"/> Other: Click or tap here to enter text. <p>Clinical Equipment:</p> <input type="checkbox"/> Anesthesia machine <input type="checkbox"/> Anesthesia cart <input type="checkbox"/> Crash cart <input type="checkbox"/> Difficult airway cart <input type="checkbox"/> MH kit <input type="checkbox"/> Pediatric airway cart <input type="checkbox"/> Glidescope <input checked="" type="checkbox"/> Intubation tray <input type="checkbox"/> Surgical tray <input checked="" type="checkbox"/> Ultrasound machine <input checked="" type="checkbox"/> Ventilator <input type="checkbox"/> Other: Click or tap here to enter text. <p>Supplies:</p> <input type="checkbox"/> A-line <input type="checkbox"/> CVC kit <input checked="" type="checkbox"/> IV admin kit <input checked="" type="checkbox"/> Airway supplies <input checked="" type="checkbox"/> PPE Other:	<p>Patient:</p> <input checked="" type="checkbox"/> Simulator: <u>Pediatric or Adult SimMan may be used</u> <input type="checkbox"/> Standardized Patient (SP) <p>Position:</p> <input type="checkbox"/> Sitting up <input checked="" type="checkbox"/> Supine <input type="checkbox"/> Prone <input type="checkbox"/> Trendelenburg <input type="checkbox"/> R. Trendelenburg <p>Moulage:</p> <input checked="" type="checkbox"/> Wig <input checked="" type="checkbox"/> C-collar <input type="checkbox"/> Backboard <input type="checkbox"/> Burns at: <input checked="" type="checkbox"/> Wounds at: <u>lower abdominal ecchymosis, scattered abrasions on extremities</u> <input checked="" type="checkbox"/> Protuberant belly (28 weeks pregnant) <p>Access:</p> <input type="checkbox"/> A-line setup <input type="checkbox"/> Central line setup <input type="checkbox"/> Urine drainage bag <input checked="" type="checkbox"/> Peripheral IV <input type="checkbox"/> PICC <input type="checkbox"/> Other: Click or tap here to enter text. <p>Airway:</p> <input type="checkbox"/> Not breathing <input type="checkbox"/> Room Air <input checked="" type="checkbox"/> Nasal cannula <input type="checkbox"/> Simple face mask <input type="checkbox"/> Non-rebreather face mask <input type="checkbox"/> Intubated on vent	<p>Monitors:</p> <input type="checkbox"/> None <input checked="" type="checkbox"/> ECG (leads: Click or tap here to enter text.) <input checked="" type="checkbox"/> HR <input checked="" type="checkbox"/> RR <input checked="" type="checkbox"/> SpO2 <input type="checkbox"/> EtCO2 <input checked="" type="checkbox"/> Temp(C) <input checked="" type="checkbox"/> NIBP <input type="checkbox"/> ABP <input type="checkbox"/> CVC <input type="checkbox"/> PAP <input type="checkbox"/> Wedge <input type="checkbox"/> Cardiac output <input type="checkbox"/> TOF <input type="checkbox"/> Anesthesia gases: Click or tap here to enter text. <p>Labs/Imaging Studies:</p> <input type="checkbox"/> ABG <input checked="" type="checkbox"/> Ultrasound <input checked="" type="checkbox"/> CXR <input type="checkbox"/> CT <input type="checkbox"/> MRI <input type="checkbox"/> Other: Click or tap here to enter text. Interpretations given only- no imaging provided <p>Other Simulators:</p> <input type="checkbox"/> Laparoscopic box trainer <input type="checkbox"/> TraumaMan <input type="checkbox"/> TraumaChild <input type="checkbox"/> Other: Click or tap here to enter text. <p>Available only if asked: If team asks for a drug or piece of equipment- you may provide if it is available and change event state and patient vitals accordingly. Skills may be performed on the manikin at the discretion of the simulation center.</p>