Eclampsia Simulation Scenario Overview

Name of Scenario: Eclampsia
Target Trainees: MDs, RNs, CNMs, PAs
Anticipated Duration: 10 min

Patient Description:
41 yo G1 P0 at 38 weeks comes to triage complaining of headache. Patient is in a gown, sitting on a bed, no monitors attached, holding head. Blood Pressure 140/90, reassuring fetal status, 4 cm dilated. Patient seiizes during initial evaluation.

History:
Prenatal care has been uncomplicated. BP elevations during the last 2 visits.
Medical - healthy
Surgical - none
Social – non-contributory

Baseline Lab Values:
N/A

Learning Objectives

Cognitive:
Patient assessment (relevant history, symptoms, fetal well being, Vital Signs, preeclampsia labs)
Emergency recognition
Eclampsia management (awareness of appropriate medication administration with correct dose/route/timing)
Assessment of fetal well being
Delivery plan formulation

Technical:
Patient positioning
Oxygen request and administration

Behavioral:
SBAR communication
Demonstrates leadership and followership
Calls for appropriate assistance
Uses closed loop communication
**Scenario Set-Up**

**Room Configuration:**
Evaluation Unit

**Equipment:**
Exam table or Labor bed
IV pole, IV tubing, IV bag
Opsites
Covered needles
Magnesium sulfate premixed bag
Magnesium sulfate 1 gm 50 % ampoule
Syringes with labels for Valium, Ativan, Phenytoin
Lab tubes for CBC, chem., lft, uric acid, type and screen
Foley
Oxygen tank
Oxygen facemask
Pulse oximeter
Blood pressure cuff

**Manikin/Task Trainer Preparations:**
Pregnancy pillow
Seizure activity for 2-4 minutes
Postictal state for the remainder

**Presets:**
Control of vital signs monitor and fetal heart rate monitor (NOELLE monitor preset)

**Simulator:**
A standardized patient actor

**Patient Monitor:**
Display of simulated maternal vital signs and fetal heart rate monitoring (NOELLE)

**Equipment Set Up:**
Routine NOELLE monitors set up

**Miscellaneous:**

**Chart Contents:**

**Demonstration Items Needed in Debriefing Room:**

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Safe Motherhood Initiative
**Scenario Logistics**

**EXPECTED INTERVENTIONS:**
- Initial problem –oriented history acquisition
- Fetal heart rate monitoring placement
- Request for VS, IV, Foley, labs
- Request for Help
- Lateral positioning
- Oxygen administration
- Request for magnesium sulfate administration with dose/route/time of bolus and maintenance
- Delivery plan formulation

**LIKELY PROGRESSION:**
- Seizure until administration of magnesium sulfate
- Postictal state with fetal heart rate deceleration for 5 minutes
- Maternal stabilization with progression to delivery

**EXPECTED ENDPOINT:**
- Stable maternal status
- Vaginal delivery for fetus

**DISTRACTERs:**
- Offer to administer 6 gm concentrated magnesium sulfate (1 gm vial, 50 %) IV by confederate (inexperienced RN)

**ADDITIONAL/OPTIONAL CHALLENGES:**
- Questioning delivery plan in anticipation of bradycardia and unstable or stable maternal condition by confederate (inexperienced RN)

**Videotape Guidelines**
(Priorities to capture on videotape)

**CONFEDERATE ROLES**

Inexperienced RN:
- Calls in RN for help in evaluation of a triage patient
- Asks to explain every step – why, what, how much, over how long if information is not volunteered by RN/MD
- Offers undiluted magnesium sulfate IV (show the vial) before getting premixed bag
- Asks for exact IV, IM magnesium dosing/route/timing if not offered
- Asks about delivery plan in anticipation of continuing bradycardia and stable versus unstable maternal signs

**Trainee Roles**

Labor and delivery Evaluation Unit Nurse
Delivering provider (MD, PA, CNM)
Debriefing Points
(Based on Eclampsia Drill Score Sheet)

Cognitive:
Patient assessment
Recognition
Eclampsia management
Fetal assessment
Delivery plan

Technical:
Medication administration
Oxygen administration
Positioning

Behavioral:
Help request
Team communication: SBAR
Situation: expression urgency when called for help
Background: conveys relevant information only
Assessment: states problem without prompt
Requests: states clear, concise requests without prompt
Closed loop communication

Adapted and used with permission from Montefiore Medical Center, 2014.

Reference List:
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