Emergency Scenarios with Case Review

Seizure

This emergency scenario is about a patient with seizure, and is set up for role-play and case review with your staff.

1) The person facilitating scenarios can print out the pages below.

2) Cut up the "role" pages, and assign several roles, distributing the "roles" to appropriate participants in clinic.

   Patient who has a seizure
   Patient's boyfriend
   Medical Assistant
   Nurse
   Doctor or Clinician
   Clinician or additional nurse
   2nd Clinic Assistant
   Manager or Administrator
   Front Desk Person

3) If your staff is smaller, you can cut optional roles. Any additional staff can be asked to observe and discuss.

4) Following role-play, gather the staff to review questions for debriefing and teaching.

5) Repeat scenario for further practice as time allows.

6) Record date of scenario and topic on your emergency scenario log (as appropriate)

Scenario 1: Seizure (8 roles)

Nakita – 27 y/o G2p0 patient at 8 weeks pregnant.

You are waiting in the hallway near the front desk. You have been waiting for your ultrasound for a while, as you would like to have a medical abortion. You are nervous. You have your boyfriend with you, but they want to send him to the waiting room. You feel a little strange, so you ask him to wait with you.

You suddenly start having a shaking seizure, go unconscious, and fall partly out of your chair (but wait for someone to put you all the way down on the floor). The seizure continues with rhythmic movements of your arms and legs. You stay unconscious, and a few minutes later, you have loss (or incontinence) of urine. You continue your seizure for about 8-10 minutes (which will give the team enough time to put in an IV and make a decision about medications). When your seizure finally stops, you act very sleepy and confused.

VS: pulse 65, resp 12, BP 110 / 80, afebrile.
2nd set of VS: pulse 75, resp 16, BP 120/85.

Medical History:	**Grand mal seizures, last 2 months ago.**
Meds:	**Dilantin (last taken yesterday)**
Habits	**No history of tobacco, alcohol or drugs (or seizures related to withdrawal)**
Past Surg	**One TAB**

Scenario 1 - Nakita's Boyfriend

You are being asked by a medical assistant to go back to the waiting room, but your girlfriend wants you to stay because she's nervous and "feels weird". You are also upset because you really aren't so sure this baby is yours, even though you've been with her a couple years.

You know that she has a history of seizures. As far as you know, your girlfriend doesn't take medicines (except of course her seizure medicine (last taken yesterday)). She has no drug / alcohol history.

Scenario 1 – Doctor or Clinician

You are doing endless chart bubbling for the clients you saw this morning, while trying to wolf down bites your lunch. You are called for the next patient who needs an US and possible Med AB. It's a family planning day in clinic. You are going to be called because of a client waiting in the hallway by the front desk (who needs the ultrasound) because she seems to "be shaking and unconscious".

Scenario 1 – Medical Assistant

You are in the hallway near the front desk, trying to convince Ms. Shakallova's boyfriend to go wait in the waiting-room. But the patient and her boyfriend don't want him to leave because she feels nervous and "really weird". The patient will suddenly have a reaction (she falls part way off the chair, is shaking, and is unconscious). You'll have to help position her and call for help.

Scenario 1 – 2nd Medical Assistant

You are in the lab, when you here a call for help (or the alarm). You may need to get more help or assist to position the patient, stay with or reassure other patients, or do what else will be necessary.

Scenario 1 - Nurse

You are in the recovery room doing some contraceptive counseling when you are called (or hear the alarm) to come assist with a patient in the hallway near the front desk. You may need to find someone to take your patient (or bring them to the waiting room). You may need to help with an IV, history review, getting meds or 02, or other stabilization.

Scenario 1 - Manager or Administrator

You are helping at the front desk when a patient waiting in the hallway near the desk starts to have a seizure. You'll need to help control the situation, help with the transfer and paperwork, and to stabilize the scene in the clinic.

Scenario 1 – Front Desk Person

You are helping at the front desk when a patient waiting in the hallway near the desk starts goes unconscious and starts shaking. You'll need to help control the situation and other patients, help with the transfer and paperwork.

Scenario 1 Review: Seizure

I) General debriefing questions:

1) Did delegation of roles happen smoothly? Without delays?
2) Did any delays affect the patient outcome?
3) Did the alarm system get activated?
4) Were other patients attended properly?
5) Did transfer occur smoothly? The decision? Communication? Paperwork?
6) Was the partner or family alerted to what happened?

II) 1) What causes seizures?

A seizure is an episode of neurological dysfunction caused by abnormal electrical discharges in the brain. Generalized seizures are caused by activation of most of the cortex at once, and are associated with unconsciousness. Partial seizures are due to discharges that begin in localized areas of the cortex, and may or may not be associated with unconsciousness.

Seizures may be due to known causes (epilepsy, drug reaction, or high fever in children) or unknown causes (idiopathic).

1. Generalized Grand mal - generalized widespread tonic-clonic convulsions producing rhythmic movements of all muscle groups. (Client is unconscious, often incontinent of urine or feces, and pulse generally stays above 60.)

2. Petite mal (generalized absence) seizures - brief transient fading of awareness of surroundings with little after-effect; there is loss of consciousness without loss of tone. Onset usually before 21 years of age.

3 Partial (focal) - unilateral jerking of hand, arm, face. or complex, repetitive behavior.

2) What might be other causes of seizure-like activity we could see in our clinics?

Seizure-like activity may accompany inadvertent IV injection of local anesthesia,, hyperventilation, vaso-vagal reaction, or cardiopulmonary arrest. Check for these conditions and treat underlying cause.

This patient might have been hyperventilating, but had no history of anesthesia or event to bring on a vaso-vagal.

3) If this were another patient desiring surgical abortion with a history of seizure disorder (last active a few months ago, currently on medication), what might you consider (or ask the doctor) prior to her procedure?

Given that local anesthetics can lower seizure threshold, it might be helpful to consider an IV heplock during the procedure just in case, or consider using an alternative to lidocaine in the para-cervical block (like saline) which also gives some relief. There might be some circumstances in which referral would be chosen.

4) Given that patients with seizures can (rarely) slow their breathing (or become apneic), what would you do if your patient started to appear blue?

Assure airway, place oxygen (by mask). Usually apnea in seizure is not prolonged, but if it were: proceed with the ABCs, call EMS immediately (911), and if needed proceed with intubation. Check oxygen saturation with vitals if possible.

III) Key Management Steps:

1. Position for safety. Be sure client does not hurt himself/herself by falling off table or against object. Try to lie client on floor if possible. Do not forcefully restrain or use bite stick. Remove objects that might injure client. Position client laterally (on side) using cushion or support.
2. Call EMS (emergency medical services).
3. Wait it out. Seizures generally run their course.
4. Insert IV line.
5. IV Valium: If seizure does not subside within 5 minutes and airway is patent, and ambulance has not come, consider injecting 5 - 10 mg Valium IV after medical consultation. If seizure does not stop within a few more minutes, another 5 mg of Valium may be injected. Give slowly (1-2 mg/minute).
6. Keep client lying down following seizure until emergency service arrives to take over. Client may remain unconscious, be confused or appear partially paralyzed.
7. Administer O_2 at 4-6 L/min until fully recovered. Continue to monitor VS and 02 saturation.

IV) Potential Skills to Review or In-Service:

Position for safety.
Brainstorm IV start under less than ideal circumstances.