N431 Adult Health II

Clinical Reflection Form

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Clinical Rotation Site: Radiology

1. Briefly write about today's experience(s)

   Today I was in the radiology department. When I initially got to the unit, I was pulled into a patient's room to watch how an anesthesiologist obtained consent for an MRI under general anesthetic. The patient was a cocaine user who was unable to stay still due to his pain. Before anesthesia, he had to verify that he had remained free of cocaine use verbally and with a urine drug test. Once it was confirmed he was safe to receive anesthesia, he was taken back to the MRI room and hooked up to the vitals monitor. He received versed to relax and propofol for the initial sedation. After the I-gel supraglottic airway was placed, the CRNA used isoflurane to maintain sedation. After the patient was in the MRI machine, we left the MRI room. I then went to the MRI suite in the emergency room for a client who needed a brain MRI with and without contrast for a potential stroke but had an implantable cardioverter-defibrillator (ICD). The patient was hooked up to vitals monitors and their ICD was deactivated. The patient had vitals charted every 5 minutes and was monitored closely for arrhythmia. After the MRI was complete, the ICD was reactivated. After returning to the radiology department, I spent time listening to the nurses educate patients on pre-procedure instructions before leaving for the day.

2. What is one thing you learned?

   I learned a lot about ICDs and the potential complications related to MRI scans. I learned that some ICDs are not compatible with MRI machines, so the patient cannot receive a scan. This is because the magnetic forces can harm the ICD and its leads, which is dangerous for patients with a potential for arrhythmias. The ICD leads could heat up and burn the heart muscle or cause abnormal rhythms from being stimulated. Most ICDs and pacemakers made now are compatible with MRI and just need to be interrogated and deactivated for the scan.

3. What is one thing you would do differently?

   If I could do anything different, I would ask to be more involved in the different processes. Being able to place the interrogator for the ICD and learn how to use it would have been interesting. I did not get to practice any skills, so being able to do so would

have helped with my understanding of what a radiology nurse does. I also wasn't aware that going to the breast biopsies was something that we could do, or else I would have asked to go see one.

4. What is your major "take home" from today's clinical experience(s)?

   My major takeaway is that radiology nurses must be incredibly knowledgeable about pharmacology and a wide variety of specialties. As they regularly do sedations and general anesthetics, the nurses must be well-versed in the potential side effects of the medications, potential interactions, antidotes, and how to handle emergencies like malignant hyperthermia. Additionally, they take care of children, so they have to know the vital signs that are within normal limits, how to do weight-based calculations, and the issues that may face the pediatric population. They help cardiac patients with ICDs, so they have to know how to read telemetry. They have cancer patients getting biopsies. They assist patients from the critical care unit, so they have to understand how to handle intubated patients. I was impressed with the wide range of patients they have and how much they must know.

5. Is there anything else you would like to mention?

   I would have liked to have gone to the biopsies or interventional radiology if that was a possibility. Radiology was interesting, but it was not very busy, so the nurses felt bad that there wasn't much to show us. They suggested going to those types of procedures as an avenue for showing another side of radiology.