RISK CASE STUDY

Case: The Unsterile Needle

Abstract:

An unsterile needle was inadvertently used on a patient undergoing a bone scan. Non-compliance with hospital policy was identified as a contributing factor.

Key Words:

Diagnostic Imaging

Nuclear Medicine

Acute Care

Hierarchy of Effectiveness

Case summary:

While preparing a patient for a total body bone scan, a nuclear medicine technologist attempted an intravenous injection of a radiopharmaceutical. After penetrating the vein and attempting to inject the agent, the technologist noted that the needle was empty. The technologist then picked up another prefilled syringe and proceeded to inject the patient with it. Following the injection, the technologist realized that the initial needle had been used for a prior patient.

Medical legal findings:

An internal investigation revealed that prior to the incident the technologist had prepared several doses for injection in advance but did not dispose of the used needles as per organizational policy. He was also in a rush at the time the incident took place. Following the incident, the organization instituted several new procedures, including additional staff training to reiterate the importance of discarding needles immediately after use. The organization also undertook an in-depth examination of all steps involved in radiopharmacy procedures to identify further opportunities for process improvements.

Reflections:

Reflecting on your practices as well as your organization's patient monitoring and communication policies, procedures, and processes:

1. This case identified instances of non-compliance with hospital policies and procedures. For example, the technologist's 'normal practice' was to prepare several injections in advance. However, the technologist did not have a failsafe process for disposing of used needles. Discuss the concept of 'normalization of deviance' as it applies to healthcare delivery. Provide some examples of this concept.
2. The technologist was in a rush at the time the incident occurred. Discuss whether a 'busy day' is an acceptable explanation for not following hospital policies. Describe processes in place at your organization to assist staff with a sudden/unexpected surge in patient volumes and to reduce distractions. Are staff aware of these supports?
3. Patient safety literature speaks to the 'hierarchy of e ffectiveness' when designing effective recommendations/ interventions following an internal review. Discuss this concept as it applies to healthcare. Discuss the effectiveness (i.e. least effective to most effective) of the interventions instituted in this case and their likelihood to prevent future occurrences.
4. An unsterile needle was used with a second patient. Reflecting on your organization's practices,

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would this incident trigger an internal 'system'/ incident/quality of care review? Describe some of the differences between an internal 'system' incident review, performance/accountability review and medical legal review? Describe what is shared with the family/patient after such reviews.

5. What supports are available to patients and staff who may have been exposed to blood borne diseases in hospital? Who leads the disclosure discussion? If a patient declines testing for HIV or hepatitis can stored samples for other tests/interventions be used/tested without the patient's consent?

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