Medication Errors

Ingestion or Aspiration of Foreign Objects or Toxic Substances Is Not Just a Safety Concern With Children

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Problem: The Institute for Safe Medication Practices (ISMP) learned about an unusual event that involved the accidental ingestion or aspiration of an unintended product by a patient who was presumably alert and oriented. The hospitalized surgical patient experienced difficulty swallowing and developed a cough after the operation. A definitive cause of these symptoms could not be determined. The patient was discharged home with instructions to follow up with the surgeon or his family physician if the symptoms continued.

The patient continued to cough and had difficulty swallowing for several weeks after discharge. During an especially strong coughing spell, the patient coughed up a small white cap. Further investigation revealed that the cap belonged to a Covidien Monoject prefilled intravenous (IV) syringe of 0.9% sodium chloride (Figure 1), which the hospital used for IV flushes at the bedside. The patient was unaware that he had ingested or inhaled the cap. Exactly when and how this happened is unknown.

Several possible scenarios have been suggested. The cap could have gotten into a cup on the patient’s bedside table, and the cup was used later to drink fluid. The cap could have been left on the bedside table, and the patient picked it up and ingested it during the immediate postoperative period while he was still groggy. Or maybe the patient thought the cap was food or a small white pill and ingested it. A nurse may have entered the room during the patient’s meal to flush the IV line and perhaps left the syringe cap on the bedside table, or even placed the syringe cap on the patient’s meal tray, intending to pick it up after flushing the IV line.

The cap could have been left in the bed covers accidentally and subsequently inhaled or expelled into children’s mouths when the plungers were pressed during administration of oral solutions to infants and children.1 In these cases, parenteral syringes had been used for oral administration. At the time, medications could be drawn into some parenteral syringes and administered without removing the cap. With pressure, though, the caps were expelled with enough force to lodge in the throat and cause asphyxiation. Practitioners should be alert to this risk and consider the proper

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disposal of syringe caps (if present) as important as syringe and sharps disposal. If feasible, remove and properly discard syringe caps in a secured sharps disposal container before administering medications or flushing lines.

Never leave fixatives, developer solutions, hazardous chemicals (e.g., cleaning agents), topical antiseptics, or other topical liquid products at the bedside or in other areas where they can be misidentified as oral products. “External Use Only” or “Hazard” labels can warn staff and patients about hazardous and topical products, but they are not always enough to prevent ingestion.

As a final safety check, staff who directly interact with patients or enter patient care areas, particularly the patient’s room or outpatient bay area, should continuously scan the patient’s environment for safety hazards and eliminate any existing hazards before leaving the patient’s bedside. Scanning the environment for hazards should also be incorporated into patient rounding procedures. Simulations where practitioners identify various hazards can be used to facilitate training. Also, encourage patients and family members to tell you if they see or find any loose objects, bottles, or solutions near the patient.

REFERENCES