Patient Safety Alert

Veterans Health Administration Warning System
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This Patient Safety Alert AL12-03 replaces and supersedes Patient Safety Advisory AD10-03 issued August 2, 2010

Item: Epinephrine, and other High Alert Medication Safety in the Operating Room

Specific Incident: During preparation of a patient for nasal surgery, the patient received an intranasal injection of epinephrine 1:1000 (1mg/mL) (5cc) rather than lidocaine 1% with epinephrine 1:100,000 (0.01mg/mL).

General Information: Administration errors of epinephrine or other high alert medications as the result of selecting the incorrect concentration or wrong drug (look-alike/sound-alike) can result in significant patient harm, including death. Although a recent incident within the VA of an inadvertent administration of concentrated epinephrine prompted the need for this Patient Safety Alert, it should be noted that this Patient Safety Alert is applicable for all medications used in perioperative and other procedural settings.

Actions:

1. By close of business (COB) April 9, 2012, **the Chief of Surgical Services or designee** will review and complete processes to assure compliance with the following actions.

    a. All medications on and off the sterile field, not intended for immediate use*, must be labeled with the medication name, strength, quantity, diluents and volume (if not apparent from the container) and expiration (date or time). Sterile preprinted medication labels must be available and utilized to identify the container in which the medication is held. Medication preparation and subsequent labeling requires a confirmation check by a second authorized staff member. Topical drugs must be marked clearly “For Topical Use”. All unlabeled solutions or medications are to be immediately discarded.

    * *An immediate use medication is one that an authorized staff member prepares or obtains, takes directly to a patient or transfers onto the operative field,*

and administers to that patient without any break in the process.

b. To ensure all medication orders are communicated in a standard and consistent fashion, the following must be completed:
    i. Verbal orders must be confirmed in the OR by repeating the complete order. For example, a surgeon verbally requests lidocaine 1% with 1:100,000 epinephrine, and the designated personnel supplying the medication verbally identifies the medication by name and concentration as it is handed to the surgeon, emphasizing the dosage on the label in mg/ml or % such as, lidocaine 1 % (10mg/mL) with 1:100,000 epinephrine (0.01 mg/mL). Surgeon confirms correct medication by verifying medication label.
    ii. When a physician cannot visually verify a labeled medication such as an ophthalmologist using a scope, the physician requests the medication as specified in 1bi and
        - the preparer of the medication must state what drug is being given to the physician,
        - the preparer of the medication must read back the entire medication label, and
        - the physician must confirm the read back.

c. Standardize the number of epinephrine concentrations stocked and minimize the number of package sizes of the same concentration.

d. Ensure high-alert medications are stocked in ready-to-use dosage forms when commercially available. Use of multi-dose vials should be minimized and, if required, used on one patient only.

e. Identify high risk medications that require dilution prior to administration (e.g., phenylephrine) and develop a process to assure these are available in the diluted form only. (Some VAMCs have the Pharmacy Department prepare these daily.)

f. Store look-alike/sound-alike medications in physically separate drawers and shelves in medication/anesthesia carts and automated dispensing cabinets. Topical products must be stored separate from parenteral products.

g. Restocking of automated dispensing cabinets (ADCs) must incorporate bar-code technology or a suitable double-check to ensure stocking of the correct drug and concentration.

h. If the VAMC is using an ADC, vials of medications, not used during procedures, must not be restocked to the ADC by the end-user.

i. Preparation of a pre-operative medication shall be completed before the preparation of another pre-medication has begun.

2. By COB April 27, 2012 the **Patient Safety Manager** must document on the VHA Hazardous Recalls/Alerts website, that Administration has reviewed and implemented these actions, or that they are not applicable to your facility.

References:

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Shah RK, Hot E, Roberson DW and Nielsen D. Errors with Concentrated Epinephrine in Otolaryngology. *The Laryngoscope*, 2008; 118: 1928-1930.

Stahel P. Learning from aviation safety: a call for formal "readbacks" in surgery. *Patient Safety in Surgery*, 2008; 2:21.

The Joint Commission. National Patient Safety Goals Effective January 1, 2012: Hospital Accreditation Program (Page 2). Viewed January 6, 2012.
http://www.jointcommission.org/hap_2012_npsgs/

Source:

A VHA facility

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