

Help Keep Patients Safe from Epidural Med Errors

Top Takeaways

- Recently, an error occurred where 4 joint replacement surgery patients received a potassium phosphate epidural injection instead of the correct local anesthetic drug. All 4 patients experienced adverse events.
- Always use barcode scanning to confirm the correct product during compounding, dispensing, etc, and scan all vials individually when batching epidural infusion bags or drawing up multiple injections.
- Don't be surprised if your hospital switches to specialty connectors (NRFit, etc) if needed to decrease epidural tubing misconnection errors.

Safety with epidural meds is back in the spotlight...due to a recent drug error that made national headlines.

Epidural meds go into the membrane space OUTSIDE the spinal cord and help with pain or inflammation. Common epidural pain meds include opioids (fentanyl, etc) and local anesthetics (bupivacaine, mepivacaine, etc).

Recently, an error occurred where 4 joint replacement surgery patients received a potassium phosphate epidural injection...instead of mepivacaine. All 4 experienced adverse events.

This is because concentrated potassium can permanently damage spinal nerve cells and prevent them from properly transmitting signals.

Take steps to help prevent a similar error from occurring.

Always use barcode scanning to confirm the correct product during compounding, dispensing, etc. Scan ALL vials individually when batching epidural infusion bags or drawing up multiple injections.

Alert the pharmacist if a barcode for the correct med doesn't scan...it may need to be updated.

Similarly, double-check that you're only using preservative-free vials when compounding epidurals...since injecting preservatives epidurally has been linked to nerve damage.

Help confirm that "epidural" is included in order titles, med labels, and routes...and alert the pharmacist if you see generic route terms, such as "spinal."

If your pharmacy uses photo verification technology in the IV room, clearly document each step of the compounding process...and ensure all necessary info (drug labels, vial expiration dates, etc) is visible.

Affix auxiliary stickers ("For epidural use only," etc) to each epidural syringe...or BOTH sides of the infusion bag...to avoid confusion with look-alike IV products.

During delivery, scan EACH epidural bag individually if possible before stocking them in automated dispensing cabinets...ideally in locked-lidded bins.

Likewise, keep continuous epidural infusions separate from similar IV bags on the floor or in procedural areas.

Use caution around med changes during a shortage. Check for look-alike drug vials, new med concentrations, different IV piggyback bag sizes, etc. Never rely on vial cap or label colors when selecting items.

Don't be surprised if your hospital switches to specialty connectors (NRFit, etc) if needed to decrease epidural tubing misconnection errors.

Get our *Safe Use of Local Anesthetics checklist* for more error-prevention strategies, info on local anesthetic toxicity, and more.

Key References:

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