Penicillin Infusion Through Epidural Catheter: A Case of Wrong Drug Administration

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- Medication errors are a significant cause of morbidity and mortality
  - Top 5 instances of death around the world
  - Of the few described cases, 3 involve antibiotic administration into the epidural space

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15:00
- 20yo G3P2 at 39+3 EGA, no PMH or allergies, presented for IOL and requested epidural analgesia

16:00
- CSE administered: 0.2% Ropivacaine + 2mcg/mL Fentanyl started at 10mL/hr through epidural catheter

18:30
- Patient experiencing intense itching not relieved with Zofran, Benadryl and Nalbuphine; elected to remove fentanyl from solution

18:50
- Pharmacy sent 0.2% Ropivacaine through tube system, oncoming anesthesiology resident changed solution and infusion resumed

21:00
- Patient endorsing labor pain despite appropriate troubleshooting

21:30
- L&D RN noted solution was penicillin, immediately changed to ropivacaine and restarted with return of adequate analgesia

23:00
- Neurology consulted, no neurologic deficits after close monitoring; healthy baby after uncomplicated delivery

Conclusion

- Reported examples of wrong drug administration through epidural catheters range from no effect detected to death, all with a variety of treatments
- Always practice “right patient, route and medication”

- Prevention is key:
  - –Distinguishing features of epidural bags, labels, and tubing (different size and/or color)
  - –Scanning medication before administration
  - –timeout before initiating infusion
  - –incompatible tubing with Luer-type connections

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Tariq, R, et. Al.; Medication Dispensing Errors And Prevention; StatPearls; 2021
Cohen MR, Smetzer JL; Mix-Ups Between Epidural Analgesia and IV Antibiotics in Labor and Delivery Units Continue to Cause Harm. *Hosp Pharm*.2019.54(3)155-159