Avoiding Too Fast IV Meds

Problem

Most medication errors occur with intravenous (IV) medications. A study done in the United Kingdom found that 49 percent of all medication errors were related to IV meds. A majority of these mistakes were due to administering the IV medications too quickly. Nurses need to be familiar with the IV drug being administered and the rates at which it needs to be administered.

Consequence

Medication errors can have severe consequences for the patient, including adverse reactions and possibly death. A nurse who makes a medication error could face disciplinary action by the employer, the professional regulatory body, and may be subject to criminal and/or civil prosecution. Nurses should never underestimate their responsibilities when preparing and administering medication, or choosing to omit it.

Solution

Here are some suggested steps to take to prevent / avoid intravenous medication errors.

- Errors with IV meds are a problem because once the drug is given, there is nothing to stop it from entering the patient’s circulatory system.
- IV medication errors can be minor, with little to no adverse effects.
- IV errors also can be major; giving Vancomycin too fast can cause hypotension and a flushing of the upper body.
- Every IV medication has a specific rate of infusion; some medication can be given quickly, while others need to be given more slowly.
- Sometimes medications need to be given slowly to monitor the effect of the drug on the patient.
- Other IV medications will lead to cardiac arrest if given too quickly.
• There are ways to safeguard against rapid administration of medications:
  
  ▪ Be familiar with the drugs most commonly used by your unit.
  ▪ If a drug is unfamiliar to you, use resources to get more information on it.
  ▪ Know how to calculate the correct rates of infusion; double check with another nurse or a supervisor.
  ▪ Never give a drug you are not familiar with; it can lead to serious problems.
  ▪ Provide alerts to staff on high-risk medications; include the maximum rate in milligrams per minute on the alert.
  ▪ Make notes about administration times in the patient’s medication record.
  ▪ Post a list of high-risk drugs and how fast they can be given in the medication rooms.
  ▪ Have the pharmacy staff place brightly colored labels warning that the drug has to be administered over a certain amount of time.

• Dilution is another way to avoid rapid administration:
  
  ▪ If a medication needs to be given over more than a minute, you can dilute it and use a syringe pump or give it as an IV piggyback.
  ▪ If you have a choice, use the less concentrated medication dose as there will be less room for error.

• If you need to monitor the patient for effects of the drug, you need to remain at the bedside to do so; do not just hang the medication and leave!

• Be aware that the most common form of medication error is giving an IV med too fast.
• Be familiar with the medications you are giving, the adverse effects, and the rate of infusion.
• Knowledge is the key to reducing the number of errors with IV meds administration.

References

electronic Medicines Compendium (eMC): http://www.medicines.org.uk

Note: A narrated e-Learning module of this Nugget is available at LearningNurse.com.