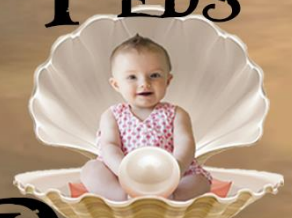
Peds Pearls



Doses and Decimals
Medication Malpractice

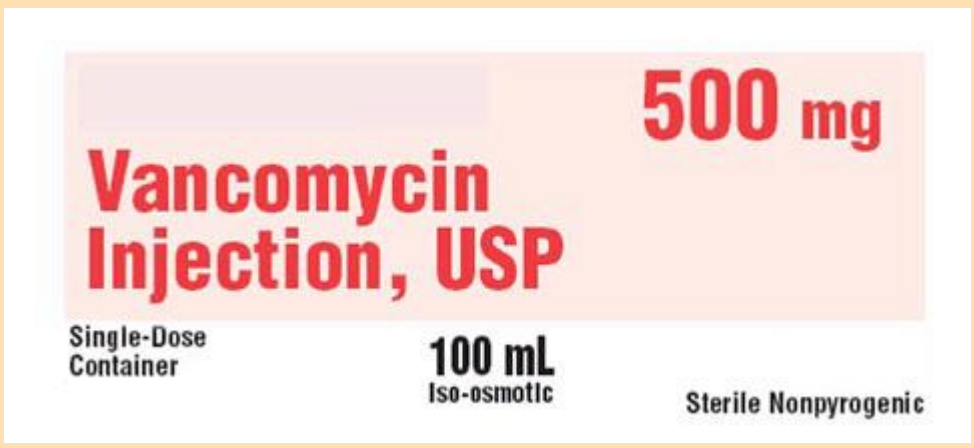
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Little Ones Get Little Doses

If it looks like the tube is way too big of a tube, it *probably is* way too big. If it sounds like way too much fluid, it *probably is* way too much fluid. And… if it seems like a big person dose of a drug, it *probably is*, and that means it *is not* the correct dose for a little one.

Several years ago, there was a medical malpractice case involving a two-week-old baby who got admitted for management of MRSA. Now, how a two-week-old gets MRSA is a whole other issue, but such is life. Vancomycin is very commonly administered to help treat MRSA. Many nurses know that the big people dose of "Vanco" is 500mg to 1000mg IV. It comes premixed in a 100mL or 250mL bag and is ready to infuse. So, big people Vancomycin dosing and administration is easy. They either get 500mg or 1000mg every 12 hours. With children, however, it's not so easy. With kids, everything is weight based and usually ordered as "something per kilo." The recommended pediatric dose is 10-15 mg/kg.

The order for this 5kg infant was for 10mg/kg of Vancomycin every 12 hours - an appropriate order. But the two-week-old infant received 500mg per dose. (Hint: Does that sound like too much?) The child received <u>three</u> adult sized doses of Vanco before the decimal point error was noted. That's 10X the appropriate dose… Not once, not twice, but three times!



With those facts established, the issues in question included:

- "How often is Vancomycin given to a two-week-old infant?"
  - "Rocephin (ceftriaxone) all the time. Vancomycin not so much."
- "Should the fact that this was apparently an adult dose have caught the attention of the nurses?"
  - "Yup. Think about it. It only makes sense that if the patient was much, much smaller, the doses should also get smaller."
- "Should the fact that the medication came premixed have caught the attention of the nurses?"
  - "Yup. Very few IV antibiotics (or any medication) come premixed for pediatric patients."
- "Should the fact that the medication came in a 100mL bag have caught the attention of the nurses?"
  - "Yup. Adults get that much fluid for antibiotics. 2-week-old babies, not so much. Again, smaller patient, smaller amount of fluid."
- "Should all of the above have come into play and resulted in the nurses simply seeking the insights of another nurse, double checking with the pharmacist, or heaven forbid, asking the doctor?"
  - "Yup."

There are lots of drug references out there in electronic as well as print formats. We highly recommend you find one you like, have it somewhere easily accessible on your unit, <u>and use it</u>. It's especially important for high-risk, low-frequency medications like Vancomycin in a two-week-old child. Taking the time and expense to get it right is much better than dealing with the after effects of getting it wrong.

Moral of the story

If it doesn't look, sound, or seem right, it probably isn't. Whether it is a miscalculation, an errant decimal point, or simply an inappropriate order, your first priority is always the care and safety of your patient!



Peds Pearls™ is a registered trademark of Pedi-Ed-Trics Emergency Medical Solutions, LLC and is intended to provide accurate pediatric emergency Tips, Tricks, and Treasures for emergency medical professionals when caring for critically ill or injured children. However, always follow your medical director's specific protocols.

Contact us to have Scott DeBoer or one of our other pediatric experts present at your next conference.

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