

Pediatric Med Math Practice Quiz #1

Show your calculations

Things to remember/recall:

1. Review how to calculate medication conversions from your pharmacology course.
2. Conversions:
 - a. grams to kilograms
 - b. kilograms to pounds
 - c. pounds to kilograms
 - d. milliliters to ounces
3. Review the injection sites for IM injections in pediatric population
4. Safe dose calculation

Review questions

1. The 2-year-old weighs 12 kg. The provider orders Tylenol 160mg PO Q4hrs prn pain. The Tylenol comes in liquid form of 80mg/5mL.
 - a. What volume of liquid will you give each time you administer the prescribed dose?
 - b. If the safe dose range is between 10mg/kg/dose and 15mg/kg/dose, not to exceed 5 doses in a 24-hour period, is the prescribed dose a safe amount to be given in a 24-hour period?
2. A 17-year-old weighing 150lbs has an order for Norco 5/325 1 tablet PO Q4hours Prn pain. If he takes this dose every 4 hours as prescribed, what is the total amount of Acetaminophen he will take in a 24-hour period?
3. An 13 month old infant weighs 8kg, has an order for Augmentin 125mg PO Q8hrs. The safe dose range is 20-40 mg/kg/24 hours.
 - a. Calculate the safe dose for this child.
 - b. What is the total amount to be given in 24 hours?

- c. Is the dosage ordered a safe dose for this child?
4. A 3-year-old child weighing 13kg is ordered Theophylline 65mg Q 6 hours via his G-tube. The safe dosage is 22mg/kg/24hours. The bottle is labeled 80mg/15mL.
- a. Calculate the safe dosage for this child?
- b. Is the dose ordered safe for this child?
- c. How much of the solution should the nurse draw up to be given for each dose (round up to the nearest whole mL)?
5. A 2 month old weighs 16.5 lbs. He has Famotidine oral suspension ordered at 0.5mg/kg once daily. The oral suspension contains 40mg/5mL.
- a. What is the dose to be given?
- b. What is the amount to be given (round to the nearest tenth)?
6. Calculate the BSA for adolescent who weighs 142 lbs and is 4 feet 10 inches
7. Calculate the BSA for a child who weighs 13.6 kg and is 90 cm.
8. A child is to receive dactinomycin 2.5 mg/m² IVP daily for 5 days as treatment for leukemia. The child weighs 48 lbs and is 4 feet 6 inches tall.
- a. Calculate the BSA for this child.
- b. Calculate the dose of dactinomycin to be given each day. (Round to the nearest tenth.)
9. Calculate the daily fluid volume for a 6 kg child.
10. Calculate the daily fluid volume for a 44-pound child.