Module 8 Notes

1. The physician orders Vistaril 20 mg IM q4h prn, nausea. The child weighs 44 pounds. Is this a safe dosage if the label reads: usual dosage is 0.5 mg to 1 mg/kg/dose every 4 hours as needed?

2. Suppose the physician orders amoxicillin 200 mg po q8h for an infant who weighs 22 lb. Is this dosage safe if the label reads: the recommended dosage is 20 to 40 mg/kg/day in divided doses every 8 hours?

Body Surface Area: surface of someone's body, skin covering him or her. You need to know their weight (kg or lb) and height (cm or in).

$$\text{Metric BSA} = \sqrt{\frac{(weight\ in\ kg)(height\ in\ cm)}{3600}}$$

$$\text{Household BSA} = \sqrt{\frac{(weight\ in\ lb)(height\ in\ inches)}{3131}}$$

Examples:
1. Find the body surface area of a person who is 5 feet 4 inches and weighs 210 pounds.

2. Find the body surface area of a person who is 220 cm tall and weighs 75 kg.

3. Child is 45 inches tall and weighs 55 pounds. Order: methotrexate 2.9 mg IV daily. Supply: methotrexate 2.5 mg/mL. Recommended dosage from drug insert: 3.3 mg/m^2.

a.) What is the BSA?

b.) What is the recommended dosage for this child?

c.) Is the order safe?

4. Child is 85 cm tall and weighs 11.5 kg. The recommended dosage is 500 mg/m^2. The doctor ordered 300 mg.

a.) What is the BSA?

b.) What is the recommended Dosage for this child?

c.) Is the order safe?