Destiny Bell

Henke's Med Math

Self test pg. 269

1. **Order: heparin sodium 800 units/hour IV**
   Supply: infusion pump, standard solution of 25,000 units in 250ml D5W
   A. What is the rate?
      - 8ml/hr
   B. How many hours will the IV run?
      - Approximately 31 hours
2. **Order: acyclovir (Zovirax) 500mg in 100ml in D5W IV over 1 hour**
   Supply: infusion pump, acyclovir (Zovirax) 500mg in 100ml D5W
   What is the rate?
      - 100ml/hr
3. **Order: Aminocaproic acid (Amicar) 24g over 24 hour IV**
   Supply: infusion pump, aminocaproic acid (Amicar) 24g in 1000ml D5W
   What is the rate?
      - 42ml/hour
4. **Order: diltiazem (Cardizem) 10mg/hour IV**
   Supply: infusion pump, diltiazem (Cardizem) 125mg in 100ml D5W
   What is the rate?
      - 8ml/hour
5. **Order: Furosemide (Lasix) infuse 4 mg/hour**
   Supply: infusion pump, furosemide (Lasix) 100mg in 100ml D5W
   What is the rate?
      - 4ml/hour
6. **Order: regular insulin 15 units/hour IV**
   Supply: infusion pump, standard solution of 125 units in 250ml NS
   A. What is the rate?
      - 30ml/hour
   B. How many hour will this IV run?
      - Approximately 8 hours
7. **Order: nitroglycerin 50mg in 250ml D5W over 24 hour via infusion pump**
   What is the rate?
      - 10ml/hour
8. **Order: heparin 1200 units/hour IV**
   Supply: infusion pump, standard solution of 25,000 units in 500ml D5W
   A. What is the rate?
      - 24ml/hour
   B. How many hours will the IV run?
      - Approximately 21 hours
9. **Order: regular insulin 23 units/hour IV**
   Supply: infusion pump, standard solution of 250 units in 250ml NS
   A. What is the rate?
      - 23ml/hour

B. How many hours will the IV run?
- Approximately 11 hours

10. Order: streptokinase (Streptase) solution 100,000 international units/hour for 24 hour IV
Supply: infusion pump, standard solution of 750,000 international units in 250 ml NS
What is the rate?
- 33ml/hour

Proficiency Test pg. 244

1. **Order: 1000ml D5NS; Run 150ml/ hour IV**
   Supply: IV bag of 1000ml D5NS
   A. Approximately how many hours will the IV run?
   - 6.6 hours or 7 if rounded up

   B. How many drops per minute (macrodrip 10 gtt/ml or microdrip 60 gtt/ml)?
   - 25 gtt/min macrodrip
   - 150 gtt/min microdrip

   C. What size tubing will you use?
   - Macrotubing
2. **Order: 100ml LR 12 noon-6 pm IV**
   A. What are the drops per minute (macrodrip 10 gtt/ml or microdrip 60 gtt/ml)?
   - 16.6 or 17 gtt/min microdrip
   - 2.7 or 3 gtt/min macrodrip

   B. What size tubing will you use?
   - Microdrip
3. **Order: 150ml NS IV over 3 hours**
   Supply; bag of 250ml NS for IV and macrotubing, 15 gtt/ml; microtubing 60 gtt/ml
   A. What would you do to obtain 150 ml NS?
   - Allow for 100ml to run off and then set the infusion pumps volume to be infused at 150ml

   B. What are the drops per minute?
   - 12.5 or 13 gtt/min macrodrip
   - 50 gtt/minute microdrip

   C. What size tubing would you use?
   - Microdrip
4. **21 ml/hr**
5. **A..** Reconstitute to add 100mg powder to 250ml D5W and give IVPB over 1 hour (60min)
   b. 42 gtt/minute

6. A. Add 5ml aminophylline to make 500mg in 250ml D5W
B. 31 ml/hour microdrip

7. 2800 ml

8. A. 90 ml/hour
B. Approximately 11 hours

9. 50mg

10. You need 75ml of D5W so you you should remove 25ml from a 100ml bag of D5W and add 5ml Bactria. Time is 60 minutes. The order is 75ml/hour

B. For 60 minutes; secondary volume 75ml, secondary rate; 75ml/hr

For 90 minutes; secondary volume 75ml, secondary rate; 50ml/hr

11. **112.5 ml Isocal, 37.5 ml water**
12. **250 ml Vivonex, 250ml water**
13. **100ml osmolite, 300ml water**
14. **500 ml Isocal, 0ml water**