

Clinical Case Studies Pgs 291-293

1. 30mg in 500 ml D5W

$$\frac{30}{500} = 0.06 \text{ mg/ml}$$

$$0.06 \times 1000 = \boxed{60 \text{ mcg/ml}}$$

2. Order: 100 mcg/minute

Solution: 30mg in 500ml

$$\frac{30}{500} = 0.06 \text{ mg}$$

$$0.06 \times 1000 = 60 \text{ mcg/ml}$$

$$\boxed{100 \text{ ml/hour}}$$

3. $\frac{4 \text{ mg}}{500 \text{ ml}} = 0.008 \text{ mg/ml}$

$$0.008 \times 1000 = \boxed{8 \text{ mcg/ml}}$$

4. $\boxed{3.76 \text{ or } 4 \text{ ml/hour}}$ 5. $12 \text{ units} \times 90 \text{ kg} = \boxed{1080 \text{ units/hour}}$ 6. $\frac{1080}{25000} \times 500 = \boxed{21.6 \text{ or } 22 \text{ ml/hour}}$
next PTT is due in
6 hours7. $\frac{100 \text{ ml} \times 10 \text{ mg}}{1 \text{ ml}} = \boxed{1000 \text{ mg}}$

8. Order: 5 mcg/kg/min

a. $5 \times 90 \text{ kg} = 450 \text{ mcg/min}$

$$\frac{1000 \text{ mg}}{100 \text{ ml}} = 10 \text{ mg/ml}$$

$$\boxed{2.69 \text{ or } 3 \text{ ml/hour}}$$

8 (B) order: 50mcg/90kg = 4500mcg/min
 $\frac{4500}{166.67} \times 1 = 26.99$ or 27ml/hour

Critical thinking

1. medication dosages may need to be adjusted since the patient has renal failure. Dosages and administration times may need adjusted depending on when the patient goes to dialysis
2. they are given together to ~~the~~ better help increase the patients blood pressure
3. The patient is intubated so this medication will help the patient rest while on the ~~ventilator~~ ventilator since its a sedative. The sedation will help ~~increase~~ decrease the oxygen demand on the heart thus helping the cardiomyopathy ~~and~~.
4. a calcium channel blocker could help but the patient is allergic.
5. The two vasopressors could be causing an increased pulse since they affect the alpha and beta receptors.
6. IV drugs are given slowly to prevent side →

u effects such as nausea.