Heparin Drip Calculation Reference

(sample calculations for reference only!)

Heparin Infusion Rate:Total Units (in IV bag)= Units/hourTotal Volume (ml)X (ml/hour)

Your patient has a DVT is ordered for a heparin infusion to start at 18 units/kg/hour per the practitioner's order. His weight is 75kg. The heparin infusion comes in a 500ml bag with 25,000 units. Calculate the starting rate of the infusion (ml/hour).

Step 1: Calculate the starting units per hour.

18 units X 75 kg = 1350 units/hour

Step 2: Calculate the starting rate of the Infusion (solve for X).

Heparin Infusion Rate: <u>25,000 units</u> = <u>1350 units/hour</u> 500ml X (ml/hour)

25,000 units (X ml/hr) = 675,000

X ml/hr = <u>675,000</u> 25,000

X = 27 ml/hour

Your patient's PTT result is 55. Per the Intravenous High Intensity Heparin Nomogram (for DVT/PE), the infusion dose should be increased by 2 units/kg/hour. Your patient is currently receiving an infusion based on 18/units/kg/hour. What is the new rate for the infusion (note: use the same initial weight to calculate the new rate).

Step 1: Calculate the new units per hour.

18 units/kg/hour + 2 units/kg/hour = 20 units/kg/hour

20units X 75 kg = 1500 units/hour

Step 2: Calculate the new rate of the infusion (solve for X).

Heparin Infusion Rate:25,000 units = 1500 units/hour500mlX (ml/hour)

25,000 units (X ml/hr) = 750,000

X ml/hr = <u>750,000</u> 25,000

X = 30 ml/hour