

Vasoactive Drip Calculations

Dopamine and Dobutamine (Rule of 15):

Concentration: 1ml/hr = 1mcg/kg/min

15 X Patient's weight (kg) = mg of drug in 250ml NS or D5W

Example: 10 kg child

15 X 10 = 150mg in 250ml Solution: 1ml/hr = 1mcg/kg/min

Epinephrine [Rule of 15 (1.5 and 0.15)]:

Concentration: 1ml/hr = 0.1mcg/kg/min

1.5 X Patient's weight (kg) = mg of drug in 250 ml NS or D5W

Example: 10 kg child

1.5 X 10 = 15mg in 250ml: 1ml/hr = 0.1mcg/kg/min

Concentration-1ml/hr = 0.01mcg/kg/min

0.15 X Patient's weight (kg) = mg of drug in 250ml NS or D5W

Example: 10kg child

0.15 X 10 = 1.5mg of drug in 250ml: 1ml/hr = 0.01mcg/kg/min

Pre-Mixed Dopamine:

*CHET Bag Concentration for Dopamine:

(200mg/250ml solution) x 1000 = 800mcg/ml

To get 1cc/hr equals how many mcg/kg/min:

(mg of Dopamine/cc of solution x 1000)/Kg Wt./60min

Example: For a 10 kg patient

(*200mg/250cc x 1000)/10/60 or 800/10/60 = 1.333

1cc = 1.333mcg/kg/min

For All Pre-mixed Drugs:

To get ml/hr on the pump:

Desired dose in mcg/kg/min x kg wt. x 60 min/hr

800 mcg/ml*

*CHET Bag Concentration for Dopamine:

(*200mg/250ml solution) x 1000 = 800mcg/ml

Remember to use different concentrations for different pre-mixed drugs

Example: To get 5mcg/kg/min for a 10kg patient:

(5mcg/kg/min x 10kg x 60min/hr) = 3.75ml/hr

800mcg/ml

(Set Pump at 3.75ml/hr to get 5mcg/kg/min)