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 ÷ 800mcg/ml = 3.75ml/hr
(Set Pump at 3.75ml/hr to get 5mcg/kg/min)

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