3% Hypertonic Saline (Sodium Chloride)

Who?

Patients with:

- Severe hyponatremia
- Increased intracerebral pressure (>20 mmHg)
- Cerebral edema

Where?

- ED
- ICU
- Neuro Step-Down Unit

Why?

- Used to increase osmolarity of blood in order to:
 - Drive interstitial fluid into intravascular space
 - Decrease brain edema
 - Improve cerebral blood flow
 - Decrease CSF production

Monitoring

- Serum sodium every 4 hours
- If chronic hyponatremia, must prevent rapid reversal (no > than 10mmol/L in 24 hours)
- BP may cause hypotension

How?

- Optimally, through central line
- If necessary can be infused via peripheral IV after site assessed for signs of infiltration
- Dual sign off medication
- Neuro check frequency determined in order set
- 250 mL bolus over 20 minutes every 4-6 hours



