

## Causes

- Vomiting, Diarrhea
- Sweating
- Inadequate intake of  $\text{Na}^+$   
(assoc c diuretics)
- Adrenal insufficiency  
(↓ aldosterone secretion)
- SIADH
- Hyperglycemia
- Tap  $\text{H}_2\text{O}$  enemas
- NG tube irrigation with tap  $\text{H}_2\text{O}$
- Compulsive  $\text{H}_2\text{O}$  drinking
- Dilutional hyponatremia = ↑ in total body  $\text{H}_2\text{O}$

## Hyponatremia

< 135 mEq/L

Ratio  $\text{Na}^+$  to  $\text{H}_2\text{O}$  ↓

## S/S

- Headache
- Confusion
- N, V
- Seizures, Coma
- Muscle weakness/cramping
- ↓ Serum  $\text{Na}^+$
- ↓ Serum osmolality

## Tx

- $\text{Na}^+$  replacement  
(oral or IV)
- $\text{H}_2\text{O}$  restriction
- 3% NaCl (hypertonic IV solution used only in emergencies)

## Associated Drugs

- Anticoagulants (heparin)
- Anticonvulsants (Acetazolamide, Carbamazepine)
- Antidiabetics (Chlorpropamide, Tolbutamide)
- Antineoplastics (Cyclophosphamide, Vincristine)
- Antipsychotics (Fluphenazine, Thioridazine, Thiothixene)
- Diuretics (Amiloride, Loop, Thiazides)
- Sedatives (Barbituates, Morphine)

## Labs

- Serum osmolality < 280 (dilute blood)
- Serum  $\text{Na}^+$  < 135
- Urine Specific Gravity < 1.010
- ↑ USG & ↑  $\text{Na}^+$  c SIADH
- ↑ Hct & plasma protein