

Causes

- **Excessive Na⁺ or fluid intake**
 - IV replacement therapy c̄ NS or Lactated Ringers
 - Blood or plasma replacement
 - ↑ dietary Na⁺ intake
- **Fluid or Na⁺ retention**
 - Heart failure
 - Cirrhosis of the liver
 - Nephrotic syndrome
 - Corticosteroid therapy
 - Hyperaldosteronism
 - ↓ intake of dietary protein
- **Shift in fluid from interstitial space to intravascular space**
 - Remobilization of fluids after burn tx
 - Hypertonic fluids
 - Plasma proteins (i.e. albumin)

Hypervolemia

Excess H₂O & Na⁺
(usually in = proportions)

S/S

- ↑ **CO**
- **Rapid, bounding pulse**
- ↑ **BP initially but as the heart fails, BP & CO ↓**
- **S₃ (gallop) may be heard**
- **JVD**
- **Edema**

Tx

- **Na⁺ & fluid restriction**
- **Meds to prevent HF & pulmonary edema**
- **Diuretics**
- **Dialysis (for renal failure)**

Labs/Diagnostics

- ↓ **Hct, ↓ serum K⁺, ↓ BUN (hemodilution)**
- **Normal serum Na⁺**
- ↓ **O₂**
- **Pulmonary congestion on chest x-ray**