

Complications of Hemodialysis

Hypotension Causes

- Medications
- Autonomic Dysfunction
- Sepsis
- Underestimation of dry weight
- Cardiac causes
 - A Fib
 - Tachycardia
 - LVH
 - Ischemia
 - Pericardial Effusion

Hypotension

Effective Interventions

- Decrease fluid gains and salt intake
- Increase treatment time
- Increase dry weight if appropriate
- Lower the dialysate temperature
- Midodrine
- Stop eating during dialysis
- ?Carnitine

Hypotension

Ineffective Interventions

- Oxygen supplementation
- Isolated UF
- Decreasing the QB
- HCT monitoring (in line)

Chest Pain Causes

- MI
- Hemolysis
- Dialyzer Reaction
- Air Embolism
- PE

Hemolysis Causes

- Increased dialysate temperature
- Formaldehyde
- Hydrogen Peroxide
- Bleach
- Chloramines
- Nitrate
- Copper
- Blood pump malfunction

Hemolysis Symptoms

- Chest pain
- Chest tightness
- Back Pain
- Dyspnea
- Increased K
- Decreased HCT
- Wine appearance of blood in the venous line
- What do you do?

Air Embolism

- See foamy blood in the venous line
- What do you do?

Fever

- Pyrogen reaction
 - Caused by:
 - Inadequate disinfection
 - Defect in the Water Processing
 - Mishandling of IV meds
- Catheter related