

Blood pump & infusion pumps



Anticoagulant

- Predisposing factors : blood flow, hemofilter type, coagulation pathway activation, convective mass transfer
- Site of thrombus formation
 - hemofilter
 - bubble trap
 - catheter
 - Areas of turbulence resistance

Anticoagulant(2)

- No anticoagulation
- Technical aspects
 - circuit
 - Blood flow rate
 - FF / predilution
- Saline flush
- Hemodilution

- Heparin
 - Unfractionated
 - LMWH
- Citrate
- Others
 - Prostacyclin
 - Danaparoid
 - Hirudin

Heparin

- Heparin infusion prior to filter and adjustment based upon parameters
- Bolus with 10-20 units/kg
- Infuse at 10-20 units/kg/hr
- Adjust post filter aPTT 1.2-1.5 time
- Interval of checking is local standard and varies from 1-4 hr increments

LMWH

- Anticoagulant effect predominantly through Antifactor Xa
- Less bleeding complication
- Longer half life and cleared by the kidneys