PROTOCOL FOR HEPARIN THERAPY

(for patients > 1 month of age)

- Obtain baseline INR, aPTT, fibrinogen, CBC, urea, creatinine before starting therapy
- Once aPTT is in the therapeutic range, repeat aPTT daily; CBC twice weekly
- Requires a dedicated line. Blood for aPTT should NOT be drawn from the extremity infusing heparin

LOADING DOSE:

75 units/kg (maximum: 5000 units/dose) -infuse IV over 10 minutes by syringe pump

INITIAL MAINTENANCE DOSE:

≤ 1 year of age: 28 units/kg/hr
> 1 year of age: 20 units/kg/hr

Adolescents and adults 18 units/kg/hr (maximum starting dose 1000 units/hr)

Obtain aPTT 4 hours after loading dose and adjust dose according to nomogram. Titrate according to table. For patients not responding as predicted or with a high initial aPTT measure unfractionated heparin level (goal: 0.35 – 0.7 units/mL). Hematology or Hematopathology consult recommended.

APTT (sec.)	Bolus (units/kg)	Holdtime (min.)	Rate Change	Repeat APTT
<50	50	0	↑ 20%	4 hr
50-59	0	0	↑ 10%	4 hr
60-85	0	0	0	24 h
86-95	0	0	↓ 10%	4 hr
96-120	0	30	↓ 10%	4 hr
>120	0	60	↓ 15%	4 hr

USUAL CONCENTRATION FOR MAINTENANCE HEPARIN:

- 50 units/mL for majority of patients
- 100 units/mL for patients who are severely fluid restricted
- Use D5W (but also compatible with saline)

CORRECT WRITING OF ORDERS:

Write orders as:

"Heparin infusion (50 units/mL) in D5W; infuse IV at units/kg/hr"

Last update: August 2018