

Heparin Infusion Quick Guide

PROCEDURE Standard (VTE, A-Fib) IV Heparin Anticoagulation Protocol

BASELINE LABS

- Draw PT/INR, aPTT, CBC if not done in the last 24 hours

TRANSITIONING

Switching TO Heparin *(If previously on another therapeutic anticoagulant--e.g., enoxaparin, fondaparinux, apixaban)*

- Wait at least 8 hours after last dose of prior anticoagulant before starting heparin
- No initial bolus *(Pharmacist may discontinue bolus order per protocol.)*
- **RN:** Call pharmacist if bolus is ordered or unclear

Switching FROM Heparin

- Stop heparin before starting another therapeutic anticoagulant
- Start timing of new anticoagulant based on labs and clinical judgement

LAB MONITORING

Activated Partial Thromboplastin Time (aPTT)

- Draw STAT aPTT q6hrs after starting drip
 - Round aPTT result to nearest whole number
 - Adjust **DOSE** based on protocol chart

aPTT Timing

- **Dose change** = count 6 hours from time of dose adjustment
- **No change** = count 6 hours from aPTT result
- After 2 consecutive aPTTs at goal range, switch to q24hrs
- If daily aPTT is out of range, restart aPTT every 6 hours.

Discontinuing aPTTs

- Discontinue aPTT draws once heparin is stopped.

CBC

- Draw CBC with platelets the day after heparin start.
- Then, every 3 days minimum while on heparin.

⚠ If unable to draw labs or patient refuses, notify provider immediately.

HEPARIN BOLUS

Initial Bolus

- 80 units/kg (Max: 10,000 units) unless otherwise ordered

Initial Infusion

- 18 units/kg/hr (Max: 2,400 units/hr) unless otherwise ordered

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HEPARIN TITRATION

Resuming Drip

- Resume at prior **DOSE** (*unless it needed adjusting before the hold*)
- No new baseline aPTT needed

If aPTT ≥ 200

- Hold drip and page MD
- Recheck aPTT every 2 hours until aPTT < 121
- Resume infusion at 4 units/kg/hr lower than previous dose

Example

- 6-hr aPTT = 205 \rightarrow Hold & notify MD
- 2 hrs later, aPTT = 115 \rightarrow Resume drip at 4 units/kg/hr less
- Next aPTT due 6 hours from dose change

NURSE MONITORING

- Monitor all incisions and drains. Notify MD if increased/sanguineous output
- Watch for blood in stool and notify MD

STANDARD PROTOCOL

Standard (VTE, A-Fib) Intravenous Heparin Anticoagulation Protocol

aPTT	Bolus	HOLD infusion	Dose Change	Next aPTT
under 30	80 units/kg	No	Increase by 4 units/kg/hr	6 hrs
30-50	40 units/kg	No	Increase by 3 units/kg/hr	6 hrs
51-69	None	No	Increase by 2 units/kg/hr	6 hrs
70-90	None	No	No Dose Change	6 hrs or next morning
91-100	None	No	Decrease by 1 unit/kg/hr	6 hrs
101-110	None	30 min	Decrease by 2 units/kg/hr	6 hrs
111-120	None	1 hr	Decrease by 3 units/kg/hr	6 hrs
121-199	None	2 hrs	Decrease by 3 units/kg/hr	6 hrs
$\geq 200^{**}$ (Page MD)	None	Hold, check aPTT q2h until $< 121^{**}$	DECREASE by 4 units/kg/hr and restart when aPTT < 121	6hrs after aPTT < 121

NEED HELP?

- Notify the pharmacist for any questions regarding protocol clarification or dose adjustment guidance.