

INTRAVENOUS HEPARIN ADMINISTRATION ORDERS

- Provider, STOP! Has your patient had a neuraxial procedure (epidural/intrathecal/spinal)?**
 Yes No If yes, I have consulted with _____ from Pain Service prior to initiating IV Heparin.
- Discontinue any previous orders for subcutaneous heparin, dalteparin OR enoxaparin
- Patient's total body weight: _____ kg (Use Weight for Calculations from ORCA)
- Loading dose of _____ units heparin IV (round to nearest 500 units)
 (suggested dose for PREVENTION, including cardiovascular indications: 50-70 units/kg)
 (suggested dose for TREATMENT, including DVT and PE: 80 units/kg)
 NO LOADING DOSE (*consider no loading dose in patients without acute thrombosis or who are already anticoagulated with warfarin/heparin/low molecular weight heparin*)
- Begin infusion at _____ units heparin IV/hr (rounded to nearest 100 units)
 (suggested PREVENTION dose: 12-15 units/kg/hr; suggested TREATMENT dose: 18 units/kg/hr)
 Use standard heparin infusion concentration of 25,000 units/250 mL D5W and infusion pump.
- Choose **ONE** of the following protocols to adjust IV heparin based on aPTT results:

NO BOLUS PROTOCOL (Do not administer bolus doses for any subtherapeutic aPTT per table)

BOLUS PROTOCOL (administer bolus doses and infusion rate per table below)

aPTT (seconds)	Hold Infusion	Change Rate of Infusion
Under 50	none	Increase by 200 units/hr
50 - 59	none	Increase by 100 units/hr
60 - 100	none	No rate change
101 – 110	none	Decrease by 100 units/hr
111 – 120	none	Decrease by 200 units/hr
121 – 150	30 minutes	Decrease by 200 units/hr
151 - 199	60 minutes	Decrease by 200 units/hr
>200	See protocol below	

aPTT (seconds)	Bolus Dose	Hold Infusion	Change Rate of Infusion
Under 50	4000 units	none	Increase by 200 units/hr
50 - 59	2000 units	none	Increase by 100 units/hr
60 - 100	no bolus	none	No rate change
101 – 110	no bolus	none	Decrease by 100 units/hr
111 – 120	no bolus	none	Decrease by 200 units/hr
121 – 150	no bolus	30 minutes	Decrease by 200 units/hr
151 - 199	no bolus	60 minutes	Decrease by 200 units/hr
>200	See protocol below		

aPTT (seconds)	Hold Infusion	Actions
200* <i>(potentially contaminated or improperly timed sample)</i>	Until aPTT < 200	Repeat STAT aPTT immediately using peripheral blood draw (or protocol on reverse) then follow protocol above if aPTT < 200 or steps below if aPTT = 200.
200 <i>(properly timed, non-contaminated sample)</i> NOTIFY MD	Until aPTT < 100	Repeat STAT aPTT hourly using peripheral blood draw (or protocol on reverse) until aPTT < 100. Then, decrease the last infusion rate by 300 units/hr and repeat aPTT in 6 hrs.

*** If aPTT was drawn less than 6 hrs after bolus, or if sample was drawn from a heparinized line, recheck aPTT using correct timing and peripheral or proper line sample technique (See Reverse)**

- Labs: baseline and every AM CBC (for platelet count and Hct), and aPTT
 aPTT 6 hours after starting heparin AND after any change in infusion rate
- Notify MD: a) for any signs of bleeding; b) if unable to obtain blood sample; c) if no IV access for > 1 hour

PHYSICIAN/ARNP/PA SIGNATURE	PRINT NAME	PAGER	NPI	DATE	TIME
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PT.NO

NAME

DOB

UW Medicine Health System
 Harborview Medical Center – UW Medical Center
 Northwest Hospital & Medical Center – University of Washington Physicians
 Seattle, Washington

IV HEPARIN ADMINISTRATION ORDERS



U1704

WHITE - MEDICAL RECORD

9. OTHER HEPARIN ORDERS (rate change, hold, etc): _____

OBTAINING BLOOD SAMPLES FOR COAGULATION STUDIES:

ALL COAGULATION STUDIES SHOULD BE COLLECTED VIA PERIPHERAL VENIPUNCTURE*.

Peripheral collection site:

Draw in the opposite extremity from the heparin infusion.

If the opposite extremity is not an option (i.e. arm precautions r/t AV shunt, s/p mastectomy, etc.) then pause the heparin infusion and draw sample from a site distal to the heparin infusion.

Collection:

Use a discard tube to clear the dead air from in the butterfly vacutainer collection system or the needle vacutainer collection system. Once blood is present in the discard tube- thus cleared the vacutainer system, remove the discard tube and begin to draw the blood samples into the vacutainer tubes.

Draw blue top tubes for coagulation labs per the recommended lab drawing order. Invert the tubes eight times.

***NOTE:** If a peripheral venipuncture is contraindicated due to the patient's clinical condition such as pancytopenia, thrombocytopenia or no peripheral access is possible, then blood specimens drawn in blue top tubes for coagulation studies may be drawn from the central venous catheter, **EXCEPT do not draw coagulation labs through** large bore dialysis/pheresis catheter of a patient receiving IV heparin infusion therapy.

***THE FOLLOWING HAS BEEN MODIFIED FROM NURSING P&P'S.**
USE FOR HEPARIN INFUSION PROTOCOL ONLY

The general procedure for drawing coagulation studies from central lines includes the following steps:

1. Stop all fluids and medications infusing through the central venous catheter.
2. Flush each of the central venous catheter lumens/ports with 10 mL normal saline and clamp lumens. Rationale: *This is to avoid reflux or backflow from a lumen with heparin in it to the lumen from which you are drawing the blood sample.*
3. Select the port for sampling. Do **not** draw specimen from the port where heparin drip is infusing.
4. Draw and discard a **9 mL waste (discard)** from one lumen/port.
5. Draw blue top tubes for coagulation labs per the recommended lab drawing order:
 - First blood cultures,
 - then blue top tubes,
 - followed by gold top tubes,
 - followed by red top tubes,
 - followed by green top tubes,
 - followed by lavender top tubes,
 - followed by gray, pearl, yellow rubber top tubes,
 - and last by anything else.
6. Note on the lab request form that the specimen has been drawn from the central venous catheter.