

SERVICE	ATTENDING	RESIDENT
DIAGNOSIS	CONDITION	

LOW RANGE HEPARIN ADMINISTRATION ORDERS
for use in patients with excessive bleeding risk

******Do NOT USE for patients with acute thromboembolism, including DVT or PE******

- Provider, STOP! Has your patient had a recent neuraxial procedure (epidural/intrathecal/spinal)?**
 Yes No
 If yes, I have consulted with _____ from Acute Pain Service (986-3334) prior to initiating IV Heparin. See ANTICOAGULATION GUIDELINES FOR NEURAXIAL PROCEDURES: <https://depts.washington.edu/medical/clinicalresources>.
- Patient's total body weight: _____ kg
- No loading dose or bolus doses are to be used
- Begin heparin infusion at _____ units/hr (rounded to nearest 100 units). Use standard heparin infusion concentration of 25,000 units/250 mL D5W and infusion pump (Suggested starting dose is 12-15 units/kg/hr)
- Adjust infusion rate as follows, based on aPTT results. Record rate of infusion at the time changes are made.

aPTT result (seconds)	Infusion hold time	Infusion rate change
< 40	None	Increase by 200 units/hr
40-59	None	Increase by 100 units/hr
60-80	None	No change
81-100	None	Decrease by 100 units/hr
101-119	30 minutes	Decrease by 200 units/hr
120 - 199	60 minutes	Decrease by 300 units/hr
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 drawn <6 hrs after bolus or if sample drawn from heparinized line, recheck aPTT using correct timing & peripheral sample technique (See nursing P&P: Venous Catheters- Drawing Blood Samples)**

- Labs:
 - baseline and qam CBC (for platelet count and Hct)
 - baseline and qam aPTT
 - aPTT 6 hours after starting heparin AND
 - aPTT 6 hours after any change in infusion rate
- Notify MD:
 - for any signs of bleeding
 - if unable to obtain blood sample
 - if no IV access for > 1 hour
- OTHER HEPARIN ORDERS (rate change, hold, etc): _____

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

NAME

DOB

UW Medicine
Harborview Medical Center – UW Medical Center
University of Washington Physicians
Seattle, Washington

LOW RANGE HEPARIN ADMIN ORDERS



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WHITE - MEDICAL RECORD
CANARY - PHARMACY
PINK - NURSING

PHYSICIAN ORDER - YELLOW

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 the required number of 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 **6ml 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.