

HEPARIN CHEAT SHEET

- About the anti-Xa level
 - More specific to heparin than PTT.
 - PTT is more of a global coagulation parameter
 - Medications other than heparin will affect the anti-Xa level
 - Apixaban and Rivaroxaban will increase the anti-Xa level
 - The clinical value of this effect is unknown
 - The therapeutic range for heparin is an anti-Xa 0.3-0.7
 - Heparin drip starting doses per BSW protocol
 - DVT/VTE: 18 units/kg/hr
 - ACS: 12 units/kg/hr
- Heparin trouble shooting

<u>PROBLEM</u>	<u>ACTION</u>
<i>Heparin and Direct Oral Anticoagulants (apixaban and rivaroxaban) complex monitoring</i>	<p><i>The DOACs can falsely elevate the anti-Xa level</i></p> <ul style="list-style-type: none"> • Consider off protocol management via pTT and/or pharmacy consultation.
<i>Heparin assay critical value (anti-Xa \geq 1.0)</i>	<ul style="list-style-type: none"> • Suggested dosing regimen: <ul style="list-style-type: none"> • <u>STEP 1:</u> Notify provider and hold heparin drip, recheck anti Xa level after 2 hours. • <u>STEP 2:</u> If anti-Xa < 1.0 → nurse to restart protocol based on anti-Xa level • <u>STEP 3:</u> If anti-Xa \geq 1.0 → Notify provider and hold heparin drip, recheck anti Xa level after 2 hours. • <u>STEP 4:</u> Repeat steps 2-3 until patient is back on the protocol (i.e. anti-Xa < 1.0)
**Remember that clinical judgement and evaluation of bleeding/clotting risk should always be employed	

HOW TO ENTER HEPARIN OFF PROTOCOL ORDERS IN EPIC

1. Use the Clinical Reference Guide
2. Enter “Misc. nursing activity” order (NUR9801) in EPIC (if feasible) and complete details as follows:
 - a. In the Specify field, type “Heparin Management Instruction for Anti Factor Xa greater than or equal to 1”
 - b. In the Comments field, type instructions per below:

“Hold heparin drip X 2 hours, recheck anti-Xa level, for anti Xa < 1.0 titrate per protocol, if anti Xa > 1.0 call provider for orders.”

The screenshot shows the EPIC order entry interface for a Heparin Management Instruction. The title bar reads "Heparin Management Instruction for Anti Factor Xa greater than or equal to 1" with "Accept" and "Cancel" buttons. The "Frequency" is set to "Once" with "Once" and "Until Discontinued" buttons. The "Starting" date is "6/10/2019" with "Today" and "Tomorrow" buttons, and the "At:" time is "1904". The "First Occurrence" is "Today 1904" and "Scheduled Times" shows "06/10/19 1904". The "Specify:" field contains the text "Heparin Management Instruction for Anti Factor Xa greater than or equal to 1". The "Comments:" field contains the text "Enter Provider instructions here, including how long to hold the heparin infusion, when to re-draw the Anti Factor Xa, and threshold for when to resume the protocol and new starting Heparin infusion rate."

3. If unable to enter “Misc nursing activity” order in EPIC upon notification, bedside nurse will obtain a verbal or telephone order. Provider will need to co-sign the order in his/her inbox.