



## Heparin Dosing Protocols

### Cardiology Service Ultrafiltration: Initial Orders

<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p><b>Pre-Treatment:</b> 3. Weigh patient just prior to therapy and daily in AM</p> <p>4. Schedule no other therapies requiring travel off unit during treatment (<i>i.e., CT, MRI, CXR, etc.</i>)</p> <p>5. Fluid restriction _____ mls / 24hr (<i>range 800-1000 mls / 24 hrs</i>)</p> <p>6. Placement of withdrawal / Infusion venous access catheter (check one):</p> <p style="padding-left: 40px;"> <input type="checkbox"/> 6 FR dual lumen dELC (extended length peripheral catheter) 20 cm    <input type="checkbox"/> Quinton catheter  <input type="checkbox"/> 7 FR dual lumen 16 gauge central venous catheter    <input type="checkbox"/> Other _____         </p> <p>7. Check that both ports of the catheter are patent by infusing and withdrawing 10 mls in 10 seconds.</p> <p style="padding-left: 20px;">a. If unable to infuse / withdraw at this rate, notify the MD / APRN</p> <p>8. Prime Ultrafiltration circuit. <b>Refer to the UF 500 package insert.</b></p> <p style="padding-left: 20px;">a. Prime filtration tubing (UF 500) with NS.</p> <p style="padding-left: 20px;">b. Prime both circuit access ports using a standard syringe.</p> <p>9. Prescribing MD/APRN to indicate discontinuation or continuation of diuretics per POE.</p>																																													
<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p><b>Anticoagulation:</b> 10. Patient reference weight: _____ kg (use patient dry weight)</p> <p>11. Heparin IV bolus _____ units IV x1. (<i>Usual bolus is 70 units/kg; max 8,000 units</i>)</p> <p style="padding-left: 20px;">a. <b>Administer Heparin bolus and initiate infusion 30 minutes prior to starting ultrafiltration</b></p> <p>12. Heparin IV infusion: 25,000 units / 500ml D5W premix (50 units/ml):</p> <p style="padding-left: 20px;">a. Infuse @ _____ units/kg/hr. (<i>usual dose is 15 units/kg/hr</i>)</p> <p style="padding-left: 20px;">b. <b>Just prior to starting therapy, transfer heparin infusion to the pre-filter infusion port (withdrawal side)</b></p> <p>13. <b>NOMOGRAM FOR HEPARIN DOSE ADJUSTMENT:</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>PTT</u></th> <th style="text-align: left;"><u>Bolus</u></th> <th style="text-align: left;"><u>Stop Infusion</u></th> <th style="text-align: left;"><u>Rate of Infusion</u></th> <th style="text-align: left;"><u>Check PTT</u></th> </tr> </thead> <tbody> <tr> <td>&lt;50</td> <td>35 units/kg</td> <td style="text-align: center;">-</td> <td>Increase 4 units/kg/hr</td> <td>4 hrs</td> </tr> <tr> <td>50-69</td> <td>20 units/kg</td> <td style="text-align: center;">-</td> <td>Increase 2 units/kg/hr</td> <td>4 hrs</td> </tr> <tr> <td>70-79</td> <td style="text-align: center;">0</td> <td style="text-align: center;">-</td> <td>Increase 1 unit/kg/hr</td> <td>4 hrs</td> </tr> <tr> <td>80-100 (target)</td> <td style="text-align: center;">0</td> <td style="text-align: center;">-</td> <td>No change</td> <td>4 hrs</td> </tr> <tr> <td>101-120</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0 min</td> <td>Decrease 1 units/kg/hr</td> <td>4 hrs</td> </tr> <tr> <td>121-150</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0 min</td> <td>Decrease 2 units/kg/hr</td> <td>4 hrs</td> </tr> <tr> <td>151-220</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0 min</td> <td>Decrease 3 units/kg/hr</td> <td>4 hrs</td> </tr> <tr> <td>&gt;220</td> <td style="text-align: center;">0</td> <td style="text-align: center;">Call MD/LIP *</td> <td>Change Per MD/LIP order **</td> <td>4 hrs</td> </tr> </tbody> </table> <p style="padding-left: 20px;">* DO NOT turn heparin infusion off without a specific order, as this may adversely affect the filter/system.</p> <p style="padding-left: 20px;">** MD/ APRN must be contacted for specific orders to decrease the infusion or discontinue the infusion for a period of time (<i>recommended not to exceed 60 minutes</i>), and to then restart at a lower rate.</p> <p>14. <b>If patient is on COUMADIN w/ INR <math>\geq</math> 2, DO NOT administer a heparin BOLUS; Maintain PTT 50-70</b></p>	<u>PTT</u>	<u>Bolus</u>	<u>Stop Infusion</u>	<u>Rate of Infusion</u>	<u>Check PTT</u>	<50	35 units/kg	-	Increase 4 units/kg/hr	4 hrs	50-69	20 units/kg	-	Increase 2 units/kg/hr	4 hrs	70-79	0	-	Increase 1 unit/kg/hr	4 hrs	80-100 (target)	0	-	No change	4 hrs	101-120	0	0 min	Decrease 1 units/kg/hr	4 hrs	121-150	0	0 min	Decrease 2 units/kg/hr	4 hrs	151-220	0	0 min	Decrease 3 units/kg/hr	4 hrs	>220	0	Call MD/LIP *	Change Per MD/LIP order **	4 hrs
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