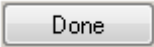


QRG – Ordering Heparin infusions		
No.	Action	Responsibility
1.	<p>From the Request / Care Plans tab in PowerChart click on +Add and type in “heparin”</p>	Doctor / NMP
2.	<p>Click on the Powerplan and select  to open the plan</p>	Doctor / NMP
3.	<p>In the plan navigate to the section for treatment of thromboembolic events with Heparin</p>	Doctor / NMP
4.	<p>Please select all three orders for heparin in this section as these cover the initial IV bolus, the infusion itself and the PRN dose of 5000 units should APTT Ratio fall below 1.2</p>	Doctor / NMP

5. In addition, laboratory tests can be ordered from this plan as required. Select the required tests and complete details as necessary.

Doctor / NMP

Monitoring of LMWH: Platelet count (FBC) should be checked on day 7 and day 14 of treatment.
 Monitoring of Heparin: APTT should be checked before starting treatment, and checked 2-4 hours after starting treatment needed in cardiac/hepatic failure or the majority of patients with renal failure and in patients with a higher risk of bleed

Clotting screen, blood
 Urea and electrolytes, blood
 Anti-factor Xa, blood
 APTT, blood
 Full blood count

needed in cardiac/hepatic failure or the majority of patients with renal failure and in patients with a higher risk of bleeding e.g. Thrombocytopenia.

Clotting screen, blood Order Collection DT/TM: 05/Jan/18 10:53 GMT

Urea and electrolytes, blood

Details for Clotting screen, blood

*Clinical details:
 *Bleep/Telephone number:
 *Collection priority:
 *Specimen type: Blood
 *Collection Date/Time: 05/01/2018 1053 GMT
 *Anticoagulants:
 Patient Category: NHS
 Clinical Trial Name:
 Copy to GP: Yes No

6. Please note that the Heparin infusion order requires a measured weight. To check if this has already been documented in Assessment / Fluid Balance and pulled through into the order (and to enter it manually if not), right-click on the order and select Modify.

Doctor / NMP

Heparin infusion needs to be ordered at the same time as the loading dose.

Heparin DOSE: 5,000 unit - ROUTE: intraVENOUS - injection - once ONLY - Give Loading dose pre-infusion
 Heparin 20,000 units in 48mL Sodium Chloride 0.9% DOSE: 48 mL - ROUTE: intraVENOUS - infusion - RATE: 2.5 mL/hour Maintain APTT ratio 1.5-2.5 See table for titration. If rate is changed, Adjust rate to maintain APTT ratio 1.5-2.5
 Heparin DOSE: 5,000 unit - ROUTE: intraVENOUS - injection - as required PRN If APTT Ratio < 1.2

Modify

Enable Edit on the Line

Laboratory

Monitoring of LMWH: Platelet count (FBC) should be checked on day 7 and day 14 of treatment.

7. This opens the heparin infusion order details. If a weight has not pulled automatically into this section, it can be added manually at this point (in kg) to complete the order.

Doctor / NMP

Details for Unfractionated Heparin for Infusion 20,000 unit [1041.67 unit/hour] + Sodium Chloride 0.9% Infusion (cont.)

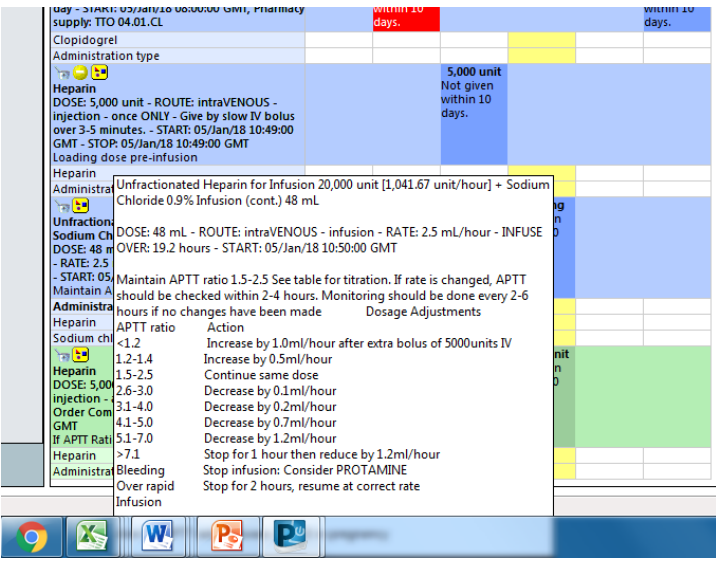
Base Solution	Bag Volume	Rate	Infuse Over
Sodium Chloride 0.9% Infusion (cont.)	48 mL	1041.67 unit/hour	
Additive	Additive Dose	Normalised Rate	Occurrence
Unfractionated Heparin for Infusion	20,000 unit	1041.67 unit/hour	Delivers Every Bag
Total Bag Volume	48 mL		

Weight:

Infusion instructions

Maintain APTT ratio 1.5-2.5 See table for titration. If rate is changed, APTT should be checked within 2-4 hours. Monitoring should be done every 2-4 hours.

APTT ratio	Action
<1.2	Increase by 1.0ml/hour after extra bolus of 5000units IV
1.2-1.4	Increase by 0.5ml/hour
1.5-2.5	Continue same dose
2.6-3.0	Decrease by 0.1ml/hour
3.1-4.0	Decrease by 0.2ml/hour
4.1-5.0	Decrease by 0.7ml/hour
5.1-7.0	Decrease by 1.2ml/hour
>7.1	Stop for 1 hour then reduce by 1.2ml/hour
Bleeding	Stop infusion: Consider PROTAMINE

8.	<p>▼ Details for Unfractionated Heparin for Infusion 20,000 unit [1041.67 unit/hour] Doctor / NMP</p> <p>Details Continuous Details Offset Details Diagnoses</p> <table border="1"> <thead> <tr> <th>Base Solution</th> <th>Bag Volume</th> <th>Rate</th> <th>Infuse Over</th> </tr> </thead> <tbody> <tr> <td>Sodium Chloride 0.9% Infusion (cont.)</td> <td>48 mL</td> <td>2.5 mL/hour</td> <td>19.2 hours</td> </tr> <tr> <th>Additive</th> <th>Additive Dose</th> <th>Normalised Rate</th> <th>Delivers</th> <th>Occurrence</th> </tr> <tr> <td>Unfractionated Heparin for Infusion</td> <td>20,000 unit</td> <td>1041.67 unit/hour</td> <td>1041.67 unit/hour</td> <td>Every Bag</td> </tr> <tr> <td colspan="2">Total Bag Volume</td> <td>48 mL</td> <td></td> <td></td> </tr> </tbody> </table> <p>Weight: <input type="text" value="75"/> <input type="text" value="kg"/> Weight Type: <input type="text" value="Manually Entered"/> Result dt/tm: <input type="text" value="05/Jan/2018 10:48:43 GMT"/></p> <p>Infusion instructions</p>	Base Solution	Bag Volume	Rate	Infuse Over	Sodium Chloride 0.9% Infusion (cont.)	48 mL	2.5 mL/hour	19.2 hours	Additive	Additive Dose	Normalised Rate	Delivers	Occurrence	Unfractionated Heparin for Infusion	20,000 unit	1041.67 unit/hour	1041.67 unit/hour	Every Bag	Total Bag Volume		48 mL			Doctor / NMP
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9.	<p>Click <input type="button" value="Orders For Signature"/></p>	Doctor / NMP																							
10.	<p>Review orders and if correct click <input type="button" value="Sign"/></p> <p>RD8-GH Ward 18; Bay E; 01 Fin#:3611730 Admit: 04/Jan/2018 11:21 GMT</p> <p>Continuous</p> <ul style="list-style-type: none"> Unfractionated Heparin Order 05/Jan/2018 10:50 GMT DOSE: 48 mL - ROUTE: intraVENOUS - infusion - RATE: 2.5 mL/hour - INFUSE O Maintain APTT ratio 1.5-2.5 See table for titration. If rate is changed, APTT shou <p>Medications</p> <ul style="list-style-type: none"> Heparin Order 05/Jan/2018 10:49 GMT DOSE: 5,000 unit - ROUTE: intraVENOUS - injection - once ONLY - Give by slow Loading dose pre-infusion Heparin Order 05/Jan/2018 10:49 GMT DOSE: 5,000 unit - ROUTE: intraVENOUS - injection - as required PRN for OTHE If APTT Ratio < 1.2 	Doctor / NMP																							
11.	<p>Please note that the rate of 2.5mL/hour is the starting rate as per policy. Nurses / midwives will adjust the administered heparin rate based on APTT Ratio as per policy and will document this accordingly.</p>	Doctor / NMP																							
12.	<p>Navigate to Drug Chart and confirm that the order displays correctly. Hovering over the order will show the order details for the infusion rates and APT ratios. N.B. in order to see all three Heparin orders grouped together; select "Therapeutic Class" in the Drug Chart.</p>  <table border="1"> <thead> <tr> <th>APTT ratio</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td><1.2</td> <td>Increase by 1.0ml/hour after extra bolus of 5000units IV</td> </tr> <tr> <td>1.2-1.4</td> <td>Increase by 0.5ml/hour</td> </tr> <tr> <td>1.5-2.5</td> <td>Continue same dose</td> </tr> <tr> <td>2.6-3.0</td> <td>Decrease by 0.1ml/hour</td> </tr> <tr> <td>3.1-4.0</td> <td>Decrease by 0.2ml/hour</td> </tr> <tr> <td>4.1-5.0</td> <td>Decrease by 0.7ml/hour</td> </tr> <tr> <td>5.1-7.0</td> <td>Decrease by 1.2ml/hour</td> </tr> <tr> <td>>7.1</td> <td>Stop for 1 hour then reduce by 1.2ml/hour</td> </tr> </tbody> </table>	APTT ratio	Action	<1.2	Increase by 1.0ml/hour after extra bolus of 5000units IV	1.2-1.4	Increase by 0.5ml/hour	1.5-2.5	Continue same dose	2.6-3.0	Decrease by 0.1ml/hour	3.1-4.0	Decrease by 0.2ml/hour	4.1-5.0	Decrease by 0.7ml/hour	5.1-7.0	Decrease by 1.2ml/hour	>7.1	Stop for 1 hour then reduce by 1.2ml/hour	Doctor / NMP					
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