**Durham VA Medical Center**

**Weight-Based Heparin Nomogram:**

**DVT/PE Protocol**

**Obtain Baseline labs:** aPTT, PT/INR, Hgb/Hct, Platelets, Chem-7, Hepatic enzymes

Monitor **Platelet count daily**

Document patient’s **weight in kg: \_\_\_\_\_\_\_**

**Initial Bolus** 80 units/**kg** \* Calculations based on **actual** body weight

(**MAX** DOSE **10,000** units) \* Round dose to **nearest 100** units \* Heparin supplied as 25,000 units/250 mL D5W

**Initial Infusion Rate** 18 units/**kg**/hour

(**MAX** INITIAL RATE **2,000** units/hr)

**\*Consider reduced dosing of 50 units/kg bolus and 15 units/kg/hour initial rate if elderly, edematous, or morbidly obese.\***

**Check initial aPTT 6 hours after starting infusion and after any rate adjustments. After two consecutive therapeutic aPTTs, may change aPTT checks to qAM.**

**Adjust heparin rate using the following chart:** **(revised 6/2009)**

**Weight-Based Heparin Rate Adjustments: Target aPTT 68-95 sec**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **aPTT** (sec) | **Bolus Dose** (units/kg) | **Stop Heparin Infusion** (minutes) | **Infusion Rate Change**(units/hr) | **Next aPTT** (6 **full** hrs after dose change) |
| <46 | 80 units/kg | 0 | ↑ 4 units/kg/hr | 6 hours |
| 46-67 | 40 units/kg | 0 | ↑ 2 units/kg/hr | 6 hours |
| **68-95\*\*** | **0** | **0** | **No change** | **6 hrs (if therapeutic x 2, change checks to qAM)** |
| 96-106 | 0 | 0 | ↓ 2 units/kg/hr | 6 hours |
| >106 | 0 | 60 min | ↓ 4 units/kg/hr | 6 hours |

* **Notify MD for any of the following: Decrease in Hgb by more than 2 g/dL, decrease in Platelet count by 30% or more from baseline, platelet count less than 100,000/mm3, aPTT above 107 sec, or signs/symptoms of bleeding or worsening thrombosis. Note: Heparin needs a second verifier!**

 **DVT/PE protocol:Physician enters initial Heparin bolus & infusion orders.**

 **Per policy, ICU/ED RN then edits CRPS for rate changes & enters repeat PTT.**

**Poster developed by CCU nursing team spearheaded by Amber Greene, RN.**

**Durham VA Medical Center**

**Weight-Based Heparin Nomogram:**

**DVT/PE Protocol**

**Obtain Baseline labs:** aPTT, PT/INR, Hgb/Hct, Platelets, Chem-7, Hepatic enzymes

Monitor **Platelet count daily**

Document patient’s **weight in kg: \_\_\_\_\_\_\_**

**Initial Bolus** 80 units/kg \* Calculations based on **actual** body weight

(**MAX** DOSE **10,000** units) \* Round dose to **nearest 100 units** \* Heparin supplied as 25,000 units/250 mL D5W

**Initial Infusion Rate** 18 units/kg/hour

(**MAX** INITIAL RATE **2,000** units/hr)

**\*Consider reduced dosing of 50 units/kg bolus and 15 units/kg/hour initial rate if elderly, edematous, or morbidly obese.\***

**Check initial aPTT 6 hours after starting infusion and after any rate adjustments. After two consecutive therapeutic aPTTs, may change aPTT checks to qAM.**

**Adjust heparin rate using the following chart:** **(revised 6/2009)**

**Weight-Based Heparin Rate Adjustments: Target aPTT 68-95 sec**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **aPTT** (sec) | **Bolus Dose** (units/kg) | **Stop Heparin Infusion** (minutes) | **Infusion Rate Change**(units/hr) | **Next aPTT** (6 **full** hrs after dose change) |
| <46 | 80 units/kg | 0 | ↑ 4 units/kg/hr | 6 hours |
| 46-67 | 40 units/kg | 0 | ↑ 2 units/kg/hr | 6 hours |
| **68-95\*\*** | **0** | **0** | **No change** | **6 hrs (if therapeutic x 2, change checks to qAM)** |
| 96-106 | 0 | 0 | ↓ 2 units/kg/hr | 6 hours |
| >106 | 0 | 60 min | ↓ 4 units/kg/hr | 6 hours |

* **Notify MD for any of the following: Decrease in Hgb by more than 2 g/dL, decrease in Platelet count by 30% or more from baseline, platelet count less than 100,000/mm3, aPTT above 107 sec, or signs/symptoms of bleeding or worsening thrombosis. Note: Heparin needs a second verifier!**

 **DVT/PE protocol:Physician enters initial Heparin bolus & infusion orders.**

 **Per policy, ICU/ED RN then edits CRPS for rate changes & enters repeat PTT.**

**Poster developed by CCU nursing team spearheaded by Amber Greene, RN.**

**Durham VA Medical Center**

**Weight-Based Heparin Nomogram:**

**DVT/PE Protocol**

**Obtain Baseline labs:** aPTT, PT/INR, Hgb/Hct, Platelets, Chem-7, Hepatic enzymes

Monitor **Platelet count daily**

Document patient’s **weight in kg: \_\_\_\_\_\_\_**

**Initial Bolus** 80 units/kg \* Calculations based on **actual** body weight

(**MAX** DOSE **10,000** units) \* Round dose to **nearest 100** units \* Heparin supplied as 25,000 units/250 mL D5W

**Initial Infusion Rate** 18 units/kg/hour

(**MAX** INITIAL RATE **2,000** units/hr)

**\*Consider reduced dosing of 50 units/kg bolus and 15 units/kg/hour initial rate if elderly, edematous, or morbidly obese.\***

**Check initial aPTT 6 hours after starting infusion and after any rate adjustments. After two consecutive therapeutic aPTTs, may change aPTT checks to qAM.**

**Adjust heparin rate using the following chart: (revised 6/2009)**

**Weight-Based Heparin Rate Adjustments: Target aPTT 68-95 sec**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **aPTT** (sec) | **Bolus Dose** (units/kg) | **Stop Heparin Infusion** (minutes) | **Infusion Rate Change**(units/hr) | **Next aPTT** (6 **full** hrs after dose change) |
| <46 | 80 units/kg | 0 | ↑ 4 units/kg/hr | 6 hours |
| 46-67 | 40 units/kg | 0 | ↑ 2 units/kg/hr | 6 hours |
| **68-95\*\*** | **0** | **0** | **No change** | **6 hrs (if therapeutic x 2, change checks to qAM)** |
| 96-106 | 0 | 0 | ↓ 2 units/kg/hr | 6 hours |
| >106 | 0 | 60 min | ↓ 4 units/kg/hr | 6 hours |

* **Notify MD for any of the following: Decrease in Hgb by more than 2 g/dL, decrease in Platelet count by 30% or more from baseline, platelet count less than 100,000/mm3, aPTT above 107 sec, or signs/symptoms of bleeding or worsening thrombosis. Note: Heparin needs a second verifier!**

 **DVT/PE protocol:Physician enters initial Heparin bolus & infusion orders.**

 **Per policy, ICU/ED RN then edits CRPS for rate changes & enters repeat PTT.**

**Poster developed by CCU nursing team spearheaded by Amber Greene, RN.**

**Durham VA Medical Center**

**Weight-Based Heparin Nomogram:**

**DVT/PE Protocol**

**Obtain Baseline labs:** aPTT, PT/INR, Hgb/Hct, Platelets, Chem-7, Hepatic enzymes

Monitor **Platelet count daily**

Document patient’s **weight in kg: \_\_\_\_\_\_\_**

**Initial Bolus** 80 units/kg \* Calculations based on **actual** body weight

(**MAX** DOSE **10,000** units) \* Round dose to **nearest 100** units \* Heparin supplied as 25,000 units/250 mL D5W

**Initial Infusion Rate** 18 units/kg/hour

(**MAX** INITIAL RATE **2,000** units/hr)

**\*Consider reduced dosing of 50 units/kg bolus and 15 units/kg/hour initial rate if elderly, edematous, or morbidly obese.\***

**Check initial aPTT 6 hours after starting infusion and after any rate adjustments. After two consecutive therapeutic aPTTs, may change aPTT checks to qAM.**

**Adjust heparin rate using the following chart:** **(revised 6/2009)**

**Weight-Based Heparin Rate Adjustments: Target aPTT 68-95 sec**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **aPTT** (sec) | **Bolus Dose** (units/kg) | **Stop Heparin Infusion** (minutes) | **Infusion Rate Change**(units/hr) | **Next aPTT** (6 **full** hrs after dose change) |
| <46 | 80 units/kg | 0 | ↑ 4 units/kg/hr | 6 hours |
| 46-67 | 40 units/kg | 0 | ↑ 2 units/kg/hr | 6 hours |
| **68-95\*\*** | **0** | **0** | **No change** | **6 hrs (if therapeutic x 2, change checks to qAM)** |
| 96-106 | 0 | 0 | ↓ 2 units/kg/hr | 6 hours |
| >106 | 0 | 60 min | ↓ 4 units/kg/hr | 6 hours |

* **Notify MD for any of the following: Decrease in Hgb by more than 2 g/dL, decrease in Platelet count by 30% or more from baseline, platelet count less than 100,000/mm3, aPTT above 107 sec, or signs/symptoms of bleeding or worsening thrombosis. Note: Heparin needs a second verifier!**

 **DVT/PE protocol:Physician enters initial Heparin bolus & infusion orders.**

 **Per policy, ICU/ED RN then edits CRPS for rate changes & enters repeat PTT.**

**Poster developed by CCU nursing team spearheaded by Amber Greene, RN.**