Table IIa. Parenteral anticoagulant medications used in pediatric thrombosis

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| **Drug** | **Treatment Dose** | **Monitoring** | **Mechanism** | **Comments** |
| **Parenteral anticoagulants** |  |  |  | All patients with new thrombosis should initiate therapy immediately with a parenteral anticoagulant. |
| Unfractionated heparin | Initial dose of 75 U/kg IV over 10 minutes followed by a maintenance IV infusion of 20 U/kg/hour in patients older than 1 year.  Patients younger than 1 year get the same initial bolus followed by 28 U/kg/hour IV infusion | Titrate infusion rate to a target aPTT of 60-85 seconds | Augments activity of antithrombin and prevents conversion of fibrinogen to fibrin | Rarely used in settings where low molecular weight heparin is available due to the need for frequent monitoring and dose adjustments and the 5-10 fold higher risk of heparin-induced thrombocytopenia with unfractionated heparin. |
| Enoxaparin (Lovenox®) | 1 mg/kg/dose every 12 hours or 1.5 mg/kg/dose every 24 hours  Patients younger than 2 months need approximately 50% more per dose and should receive the q 12 hour schedule | Measurement of anti-Factor Xa activity with a target of 0.5 to 1 U/mL at 4 hours after the dose | Augments activity of antithrombin and thus inhibits Factor Xa |  |
| Dalteparin (Fragmin®) | 100 IU/kg/dose every 12 hours or 200 IU/kg/dose every 24 hours | Measurement of anti-Factor Xa activity with a target of 0.5 to 1 U/mL at 4 hours after the dose | Augments activity of antithrombin and thus inhibits Factor Xa | Extended treatment in cancer patients is given at 150 IU/kg daily after 1 month at the treatment dose (with special precautions during periods of thrombocytopenia). |
| Fondaparinux (Arixtra®) | Adult dosing is based on weight category: <50 kg: 5 mg daily; 50-100 kg: 7.5 mg daily; >100 kg: 10 mg daily.  Pediatric dosing is not well established, but 0.1 mg/kg has been successfully used. | Measurement of anti-Factor Xa activity with a target of 0.5 to 1.2 mg/L at 4 hours after the dose | Augments activity of antithrombin and thus inhibits Factor Xa |  |