

## GUIDELINES ON ANTICOAGULATION AND NEURAXIAL BLOCKS (ASRA Consensus Guidelines - 2003)

### Antiplatelet Medications

<i>NSAIDs or COX-2 inhibitors</i>	may continue
<i>Aspirin (low dose)</i>	preferably stopped 2-3 days prior for thoracic and cervical epidurals, may be continued in lumbar epidurals.
<i>Aggrenox</i>	discontinue for 3 days
<b>Thienopyridine derivatives</b>	
<i>Clopidogrel (Plavix)</i>	discontinue for 7 days
<i>Ticlopidine (Ticlid)</i>	discontinue for 10 days
<i>Ticagrelor (Brilinta)</i>	discontinue for 5 days
<i>Prasugrel (Effient)</i>	discontinue for 7-10 days
<b>Glycoprotein IIb/IIIa inhibitors</b>	
<i>Abciximab (ReoPro)</i>	24 - 48 hours
<i>Eptifibatide (Integrilin)</i>	4 - 8 hours
<i>Tirofiban (Aggrastat)</i>	4 - 8 hours

### Warfarin (Coumadin)

Check INR (coagulation response time) - **INR <1.5** before neuraxial block

### Heparin

<i>Subcutaneous Heparin (5000 units every 12 hours)</i>	Is not a contraindication
* Block should be performed before the injection is given	
** If frequency is 3 times a day or more, the block should not be performed	
<i>Intravenous Heparin</i>	Wait 2 - 4 hours after last dose of IV heparin
* Wait minimum of 1 hour after neuraxial block to restart IV heparin	

### Low Molecular Weight Heparin (LMWH)

LMWH preoperative - Wait time from last dose	
<i>Enoxaparin (Lovenox) 0.5 mg/kg BID (prophylactic dose)</i>	12 hours
<i>Enoxaparin (Lovenox) 1 mg/kg BID (prophylactic dose)</i>	24 hours
<i>Enoxaparin (Lovenox) 1.5 mg/kg QD</i>	24 hours
<i>Dalteparin (Fragmin) 120 units/kg BID</i>	24 hours
<i>Dalteparin (Fragmin) 200 units/kg QD</i>	24 hours
<i>Tinzaparin (Innohep) 175 units/kg QD</i>	24 hours

## LMWH postoperative - Time to wait after procedure before restarting

Twice-daily dosing	24 hours
Once-daily dosing	6 - 8 hours

## Patients with Epidural Catheter on LMWH

*Enoxaparin (Lovenox)* 0.5 mg/kg: remove the catheter  $\geq$  12 hours after last dose  
*Enoxaparin (Lovenox)* 1 to 1.5 mg/kg, *Dalteparin (Fragmin)*, or *Tinzaparin (Innhop)*: remove the catheter  $\geq$  24 hours after last dose

- \* The catheter should be removed as soon as possible
- \*\* Restart the LMWH  $\geq$  2 hours catheter removal

## Specific Xa Inhibitor

<i>Rivaroxaban (Xarelto)</i>	No definitive recommendations
<i>Apixaban (Eliquis)</i>	No definitive recommendations
<i>Edoxaban (Lixiana)</i>	No definitive recommendations

- \* Suggest discontinue 3 - 4 days prior
- \*\* Suggest restart at least 8 hours after procedure

## Fibrinolytic/Thrombolytic Drugs

No definitive recommendations

## Thrombin Inhibitors

<i>Dabigatran (Pradaxa)</i>	Normal CrCl - discontinue for 2 days Abnormal CrCl - discontinue for 4 days
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## Herbal Therapy

Neuraxial block not contraindicated for single herbal medication use.

- \* The following are the times to normal hemostasis due to anticoagulant effect:

Garlic:	7 days
Ginkgo:	3 days
Ginseng:	24 hours

- \*\* The guidelines are the same for the placement and removal of epidural catheters



These guidelines were created by the American Society of Regional Anesthesia: second ASRA consensus conference on neuraxial anesthesia and anticoagulation and published in 2003. While these guidelines aim to reduce the complication of bleeding as much as possible, nothing is 100%. At the Ainsworth Institute, we strictly follow the ASRA consensus guidelines. This is provided as a resource to our patients to find information about the medications they may be taking.