

**GUAM MEMORIAL HOSPITAL AUTHORITY
ADULT VENOUS THROMBOEMBOLIC (VTE) PROPHYLAXIS**

**Deep Vein Thrombosis Risk Factor Assessment:
Check all pertinent thromboembolism risk factors (RFs).**

<p><u>RFs with value of 1 point</u></p> <input type="checkbox"/> Age 41 to 60 years <input type="checkbox"/> Family history of DVT or PE <input type="checkbox"/> Leg swelling, ulcers, stasis, varicose veins <input type="checkbox"/> MI/CHF <input type="checkbox"/> Stroke with paralysis (chronic) <input type="checkbox"/> Inflammatory bowel disease <input type="checkbox"/> Central line <input type="checkbox"/> Bed confinement/immobilization > 12 hr <input type="checkbox"/> General anesthesia time > 2 hr <input type="checkbox"/> Pregnancy, or postpartum < 1 month <input type="checkbox"/> Obesity (>20% over IBW) <input type="checkbox"/> Estrogen therapy	<p><u>RFs with value of 2 points</u></p> <input type="checkbox"/> Age 61 to 70 years <input type="checkbox"/> Major surgery <input type="checkbox"/> Spinal cord injury with paralysis <hr/> <p><u>RFs with value of 3 points</u></p> <input type="checkbox"/> Age over 70 years <input type="checkbox"/> Inherited thrombophilia <input type="checkbox"/> Acquired thrombophilia	<p><u>High Risk Factors</u></p> <p>Any ONE is an indication of VTE prophylaxis</p> <input type="checkbox"/> Major trauma (abdomen, pelvis, hip, or leg) <input type="checkbox"/> Ischemic (non-hemorrhagic) acute stroke or paralysis <input type="checkbox"/> Malignancy <input type="checkbox"/> Any prior history of deep vein thrombosis or pulmonary embolism <input type="checkbox"/> Any hip or knee replacement therapy <input type="checkbox"/> Any hip fractural surgery
<p>Total Risk Factor Score: Low = 0 Moderate = 1 to 2 High = 3 to 4 Very High = 4</p>		

Abbreviations:

LDUH – low dose unfractionated heparin; LMWH – low molecular weight heparin; SCD – sequential compression device

Low Risk (0 RFs)	Moderate Risk (1-2 RFs)	High Risk (3-4 RFs)	Very High Risk (>4 RFs)
Early ambulation	<ul style="list-style-type: none"> • LDUH (5,000 units) every 8-12 hr, <li style="text-align: center;"><i>or</i> • LMWH, <i>or</i> • SCD 	<ul style="list-style-type: none"> • LDUH (5,000 units) every 8 to 12 hr, <li style="text-align: center;"><i>or</i> • LMWH, <i>or</i> • SCD 	<ul style="list-style-type: none"> • LMWH, <i>or</i> • Warfarin, INR 2-3

Contraindications to Pharmacologic Prophylaxis

<p><u>Relative</u></p> <input type="checkbox"/> History of cerebral hemorrhage <input type="checkbox"/> Craniotomy within 2 weeks <input type="checkbox"/> GI, GU hemorrhage within the last 6 months <input type="checkbox"/> Thrombocytopenia <input type="checkbox"/> Coagulopathy (PT > 18 sec) <input type="checkbox"/> Active intracranial lesions/neoplasms/monitoring devices <input type="checkbox"/> Proliferative retinopathy <input type="checkbox"/> Vascular access/biopsy sites inaccessible to hemostatic control	<p><u>Absolute</u></p> <input type="checkbox"/> Active hemorrhage <input type="checkbox"/> Heparin or Warfarin use in patients with Heparin-induced thrombocytopenia <input type="checkbox"/> Warfarin use in the first trimester of pregnancy <input type="checkbox"/> Severe trauma to head, spinal cord, or extremities with hemorrhage within the last 4 weeks <input type="checkbox"/> Recent intraocular or intracranial surgery <input type="checkbox"/> Uncontrolled hypertension
---	---

Order for Laboratory: (Check box to activate order)

- CBC with platelets every other day** if Heparin or Low Molecular Weight Heparin is used
- Daily INR** if Warfarin is used

ADULT VTE Prophylaxis Protocol

PATIENT ID LABEL

**GUAM MEMORIAL HOSPITAL AUTHORITY
ADULT VENOUS THROMBOEMBOLIC (VTE) PROPHYLAXIS (continued)**

1. Intermittent Sequential Pneumatic Compression Device (SCD) bilateral for the leg/calf

PHARMACY: (Please check appropriate boxes for patient.)

2. Heparin 5,000 units subcutaneously every eight hours
3. Enoxaparin (Lovenox) injection 40 milligrams subcutaneously daily, *or*
 Enoxaparin (Lovenox) injection 30 milligrams subcutaneously every 12 hours
4. Dalteparin (Fragmin) injection 2,500 units subcutaneously daily, *or*
 Dalteparin (Fragmin) injection 5,000 units subcutaneously daily
5. Warfarin _____ milligrams daily p.o.
6. **No VTE Prophylaxis at this time (reason)** _____
7. _____

Guidelines for Use of Antithrombotic Prophylaxis in Patients with Epidural Catheters

For patients receiving low-dose SQ unfractionated heparin (5,000 units every 12 hours)

- Wait 4 to 6 hours after a prophylactic dose of unfractionated Heparin before placing or removing a catheter.
- Initiate unfractionated Heparin thromboprophylaxis 1 to 2 hours after placing or removing a catheter.
- Concurrent use of epidural or spinal catheter and SQ low-dose unfractionated heparin is not contraindicated.

For patients receiving prophylactic-dose low molecular weight heparin

- Wait 24 hours after a prophylactic dose of low molecular weight Heparin before placing a catheter or performing a neuraxial block.
- Wait 12 to 24 hours after a prophylactic dose of low molecular weight heparin before removing catheter.
- Initiate low molecular weight Heparin thromboprophylaxis 24 hours after a “single shot” spinal procedure.
- Concurrent use of an epidural catheter and low molecular weight Heparin thromboprophylaxis needs to be approved by the anesthesia service.

For patients receiving fondaparinux

Extreme caution is warranted given the sustained antithrombotic effect, early postoperative dosing, and “irreversibility.”

Special Considerations

Renal Impairment: Use low molecular weight heparins with **caution** in patients with SCr > 2 or CrCl < 30 mL/min. Use of fondaparinux is contraindicated in patients with a CrCL < 30 mL/min.

Patients < 50 kg: Consider dose adjustments for pharmacologic prophylaxis in patients with a weight of < 50 kg. Fondaparinux should **not** be used in patients < 50 kg.

Obesity: Appropriate dosing for obese patients is **not** well established.

Physician Signature:

Date:

Time:

ADULT VTE Prophylaxis Protocol

PATIENT ID LABEL

Page 2 of 2

GMHA #049020 Stock # 99049020

Approved Date: MEC 4/2010, HIMC 6/2010 Form Revised 6/2010