

## General Information

<b>Policy Name:</b>	Venous Thromboembolism (VTE) Prophylaxis
<b>Category:</b>	Med/Surg
<b>Applies To:</b>	Providers, Registered Nurses, Nursing Assistants, Techs
<b>Key Words:</b>	VTE, DVT, Thromboembolism, Teds, SCD, Anticoagulants, Pulmonary Embolism
<b>Associated Forms &amp; Policies:</b>	<a href="#">SCD Patient Education (Doc #8112)</a>
<b>Original Effective Date:</b>	04/20/16
<b>Review Dates:</b>	
<b>Revision Dates:</b>	03/14/18, 12/19/19, 10/12/21
<b>This Version's Effective Date:</b>	10/12/21

## Policy

VTE (deep vein thrombosis and/or pulmonary embolism) is a leading cause of morbidity and mortality amongst hospitalized patients. VTE prophylaxis measures are related to the individual's risk.

## Procedure

Risk Assessment is done on patients on admission. Risk Assessment is found in the Admission Order set.

Early ambulation and hydration are key to prevention of DVT.

Mechanical Thromboprophylaxis- Antiembolic stockings and/or SCD's should be used to prevent VTE.

TED Stockings should be removed briefly every 8 hours to check skin integrity.

SCDs should be worn continuously as ordered (remove briefly to check skin integrity once a shift then reapply).

**Note:** SCDs should be continued while patient is in a chair unless their risk of fall greatly outweighs their risk of VTE per clinician judgment

Antiembolic stockings (ie. Teds) and Sequential compression devices (SCDs) should be applied only with a provider order. They should **not** be applied if VTE is suspected. Signs and symptoms of VTE include a swollen extremity; pain; warm; discolored skin; and elevated temperature

For measuring and application refer to package insert/manufacturer guidelines

All operative patients require at least mechanical thromboprophylaxis with a Sequential Compression Device (SCD).

Chemophylaxis timing is critical in prevention of complications surrounding regional anesthesia see Recommendations for Timing with Spinal/Epidural Anesthesia Table in the Addendum section.

### Pregnant Woman:

Pregnant women have a five-fold increased risk of venous thromboembolism compared to the non-pregnant woman.

IV heparin drip may be considered for select at risk patients (Pregnant women with mechanical heart valves and those with active VTE) consultation with Maternal Fetal Medicine, Internal Medicine/Hematology, or Cardiology are recommended.

IV Argatroban is not used in pregnancy.

### References

ACOG District II Safe Motherhood Initiative (SMI) Data Collection/General Data Measures Monthly Data Questions (version August 2015)

### Definitions

<b>High Risk Thrombophilia:</b>	<ul style="list-style-type: none"><li>• Factor V Leiden (FVL) or prothrombin gene mutation homozygous</li><li>• Antithrombin III deficiency</li><li>• Compound heterozygote disorders (FVL and prothrombin)</li></ul>
<b>Low Risk Thrombophilia</b>	<ul style="list-style-type: none"><li>• Factor V Leiden or prothrombin gene mutation heterozygous</li><li>• Protein C or S deficiency</li></ul>
<b>Acquired Thrombophilia</b>	<ul style="list-style-type: none"><li>• Antiphospholipid antibody syndrome</li></ul>

### Addendums, Diagrams & Illustrations

### Recommendations for Timing with Spinal/Epidural Anesthesia

<b>Antepartum/Intrapartum</b>	<b>Timing for Neuraxial Blockade</b>
UFH Prophylaxis (<10,000IU/day)	no contraindications to timing of heparin dose and performance of neuraxial blockade
Unfractionated Heparin: UFH Therapeutic Dose	wait 6 hours post last dose prior to spinal/epidural
Low Molecular Weight Heparin: LMWH (example lovenox/enoxaparin) Prophylaxis Dose	wait 12 hours post last dose prior to spinal/epidural
Low Molecular Weight Heparin: LMWH (example lovenox/enoxaparin )Therapeutic Dose	wait 24 hours post last dose prior to spinal/epidural

**Recommendations for Timing with Spinal/Epidural Anesthesia**

<b>Postpartum</b>	<b>Timing for Neuraxial Blockade</b>
Unfractionated heparin: UFH (example heparin) Prophylaxis Dose	wait $\geq$ 1 hour after epidural catheter removal or spinal needle placement
Unfractionated heparin: UFH (example heparin) Therapeutic Dose	wait $\geq$ 1 hour after epidural catheter removal or spinal needle placement
Low Molecular Weight Heparin: LMWH (example lovenox/enoxaparin) Prophylaxis Dose	wait $\geq$ 4 hours after epidural catheter removal or spinal needle placement
Low Molecular Weight Heparin: LMWH (example lovenox/enoxaparin) Therapeutic Dose	Avoid therapeutic dosing with epidural catheter in situ. Wait at least 24 hours after catheter removal or spinal needle