

Deep Vein Thrombosis (DVT)

Prophylaxis Orders

(For use in Elective General Surgery Patients)

Thrombosis Risk Factor Assessment (Choose all that apply)

BIRTHDATE _____

NAME _____

CPI No. _____

SEX M F VISIT No. _____

Each Risk Factor Represents 1 Point

- Age 41-60 years
- Swollen legs (current)
- Varicose veins
- Obesity (BMI >25)
- Minor surgery planned
- Sepsis (<1 month)
- Serious Lung disease including pneumonia (<1 month)
- Oral contraceptives or hormone replacement therapy
- Pregnancy or postpartum (<1 month)
- History of unexplained stillborn infant, recurrent spontaneous abortion (≥ 3), premature birth with toxemia or growth-restricted infant
- Other risk factors _____

- Acute myocardial infarction
- Congestive heart failure (<1 month)
- Medical patient currently at bed rest
- History of inflammatory bowel disease
- History of prior major surgery (<1 month)
- Abnormal pulmonary function (COPD)

Subtotal: _____

Each Risk Factor Represents 5 Points

- Stroke (<1 month)
- Elective major lower extremity arthroplasty
- Hip, pelvis or leg fracture (<1 month)
- Acute spinal cord injury (paralysis) (<1 month)
- Multiple trauma (<1 month)

Subtotal: _____

Each Risk Factor Represents 2 Points

- Age 61-74 years
- Arthroscopic surgery
- Malignancy (present or previous)
- Laparoscopic surgery (>45 minutes)
- Patient confined to bed (>72 hours)
- Immobilizing plaster cast (<1 month)
- Central venous access
- Major surgery (>45 minutes)

Subtotal: _____

Each Risk Factor Represents 3 Points

- Age 75 years or older
- History of DVT/PE
- Positive Factor V Leiden
- Elevated serum homocysteine
- Heparin-induced thrombocytopenia (HIT)
(Do not use heparin or any low molecular weight heparin)
- Elevated anticardiolipin antibodies
- Other congenital or acquired thrombophilia
- If yes: Type _____

* **most frequently missed risk factor**

Subtotal: _____

TOTAL RISK FACTOR SCORE: _____

FACTORS ASSOCIATED WITH INCREASED BLEEDING

Patient may not be a candidate for anticoagulant therapy & SCDs should be considered.

Active Bleed, Ingestion of Oral Anticoagulants, Administration of glycoprotein IIb/IIIa inhibitors, History of heparin induced thrombocytopenia

CLINICAL CONSIDERATIONS FOR THE USE OF SEQUENTIAL COMPRESSION DEVICES (SCD)

Patient may not be a candidate for SCDs & alternative prophylactic measures should be considered.

Patients with Severe Peripheral Arterial Disease, CHF, Acute Superficial DVT

Total Risk Factor Score	Risk Level	Prophylaxis Regimen
0	VERY LOW	<input type="checkbox"/> Early ambulation
1-2	LOW	<input type="checkbox"/> Sequential Compression Device (SCD)
3-4	MODERATE	Choose ONE of the following medications +/- compression devices: <input type="checkbox"/> Sequential Compression Device (SCD) - Optional <input type="checkbox"/> Heparin 5000 units SQ TID <input type="checkbox"/> Enoxaparin/Lovenox: <input type="checkbox"/> 40mg SQ daily (WT < 150kg, CrCl > 30mL/min) <input type="checkbox"/> 30mg SQ daily (WT < 150kg, CrCl = 10-29mL/min) <input type="checkbox"/> 30mg SQ BID (WT > 150kg, CrCl > 30mL/min) (Please refer to Dosing Guidelines on the back of this form)
5 or more	HIGH	Choose ONE of the following medications PLUS compression devices: <input type="checkbox"/> Sequential Compression Device (SCD) <input type="checkbox"/> Heparin 5000 units SQ TID (Preferred with Epidurals) <input type="checkbox"/> Enoxaparin/Lovenox (Preferred): <input type="checkbox"/> 40mg SQ daily (WT < 150kg, CrCl > 30mL/min) <input type="checkbox"/> 30mg SQ daily (WT < 150kg, CrCl = 10-29mL/min) <input type="checkbox"/> 30mg SQ BID (WT > 150kg, CrCl > 30mL/min) (Please refer to Dosing Guidelines on the back of this form)

Ambulatory Surgery - No orders for venous thromboembolic prophylaxis required

VTE Prophylaxis Contraindicated, Reason: _____

Joseph A. Caprini, MD, MS, FACS, RVT
VTE Risk Factor Assessment Tool

Physician Signature	Dr. #	Date	Time
Processed By:		Date/Time:	
White-Medical Record Yellow-MIS Pink-Pharmacy	 University of Michigan Health System	DVT Prophylaxis Regimen	

UMHS ENOXAPARIN DOSING GUIDELINES

- MUST wait 24 hours before starting Enoxaparin if patient has epidural catheter
- D/C Enoxaparin 10-12 hours prior to removing epidural catheter
- May restart Enoxaparin 24 hours after epidural catheter has been removed.

NON-PREGNANT PATIENTS

Body weight < 150kg, CrCl > 30mL/min: **Enoxaparin 40mg SQ daily**
 Body weight < 150kg, CrCl = 10-29mL/min: **Enoxaparin 30mg SQ daily**
 Body weight > 150kg, CrCl > 30mL/min: **Enoxaparin 30mg SQ BID**

PREGNANT PATIENTS

Prevention of DVT:#

Maternal body weight (start of therapy) < 75 kg:
Recommend 30 mg SQ once daily until 20 weeks
Recommend 30 mg SQ BID after 20 weeks

Maternal body weight (start of therapy) ≥ 75 kg:
Recommend 40 mg SQ once daily until 20 weeks
Recommend 40 mg SQ BID after 20 weeks

#Wait 12 hours before regional anesthesia

MONITORING RECOMMENDATIONS

- Patients who are obese (actual body weight > 150 kg)
- Patients who are pregnant
- Patients with renal insufficiency (creatinine clearance < 30 ml/min)

Indication	Desired Level (Draw 4 hours after the 4 th dose)	Recommendations for Dose Alteration		
		Anti-factor Xa Level (units/ml)	Dose Adjustment	Repeat Anti-factor Xa To Be Obtained
Prevention of DVT/PE	0.2 to 0.5 units/ml	< 0.2	Increase by 25 %	4 hours after 4 th dose
		0.2 to 0.5	No change	Repeat in 1 week, then monthly thereafter
		0.6 to 1	Decrease by 20 %	4 hours after 4 th dose
		> 1	Hold for 3 hours, then decrease next dose by 30%	4 hours after 4 th dose

Ideal Body Weight

IBW, men = 50 kg + 2.3 (inches > 5 feet)

IBW, women = 45.5 kg + 2.3 (inches > 5 feet)