

Department of Surgery

Venous Thromboembolism (VTE) Risk Factor Assessment

Procedure: _____

Date of Surgery: _____

Surgeon: _____

A) Assess Patient Risk of Developing A VTE Based On CAPRINI Tool (Choose All That Apply)

a1) Each Risk Factor Represents: 1 point

- Age 40-59 years
- Minor surgery planned (less than 45 mins)
- History of prior major surgery (less than 1 month)
- History of inflammatory bowel disease
- Swollen legs current
- Obesity (BMI greater than 30)
- Acute myocardial infarction (less than 1 month)
- Congestive heart failure (less than 1 month)
- Sepsis (less than 1 month)
- Serious acute lung disease (less than 1 month)
- Abnormal pulmonary function (COPD)
- Medical patient currently at bed rest

b) Each Risk Factor Represents: 2 Points

- Age 60-74 years
- Major surgery (greater than 45 mins)
- Central venous access
- Leg plaster cast or brace
- Laparoscopic surgery (greater than 45 mins)
- Arthroscopic surgery
- Previous cancer/malignancy (except non-melanoma skin)
- Present cancer/malignancy
- Medical patient confined to bedrest greater than 72 hours

c) Each Risk Factor Represents: 3 Points

- Age 75 years or more
- History of DVT/PE
- Present chemotherapy
- Family History or DVT/PE
- Elevated serum homocysteine
- Positive Lupus anticoagulant
- Elevated anticardiolipin antibodies
- Positive Factor V Leiden
- Heparin-induced thrombocytopenia (HIT)
- Other thrombophilia type

a2) For Women Only -

Each Risk Factor Represents: 1 Point

- Oral contraceptives or hormone replacement therapy
- Pregnancy or postpartum (less than 1 month)
- History of unexplained stillborn infant, recurrent spontaneous abortion (greater than or equal to 3), premature birth with toxemia of pregnancy or growth restricted infant

d) Each Risk Factor Represents: 5 Points

- Major surgery (greater than 6 hours)
- Stroke (less than 1 month)
- Hip, pelvis, or leg fracture (less than 1 month)
- Acute spinal cord injury (paralysis) (less than 1 month)
- Multiple trauma (less than 1 month)
- Elective major lower extremity arthroplasty

ADD UP ALL THE POINTS FOR TOTAL CAPRINI DVT RISK SCORE: _____

PHYSICIAN SIGNATURE: _____

Potential Contraindications for use of Anticoagulants: Factors Associated with Increased Bleeding

- Patient is experiencing active bleeding
- Patient has (or history of) heparin-induced thrombocytopenia (HIT) – consult medicine
- Patient's platelet count < 30 x 10⁹ per liter
- Patient taking oral anticoagulants

Potential Contraindications to use of Sequential Compression Device (SCD's):

- Patient has severe peripheral arterial disease
- Patient has congestive heart failure
- Patient has an acute superficial/deep vein thrombosis

REFER TO BACK OF PAGE FOR TREATMENT RECOMMENDATIONS BASED ON CAPRINI DVT RISK SCORE

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B) Treat Based On Total CAPRINI DVT Risk Score Recommendations:

- ✓ **Administer initial dose of Venous Thromboembolism Prophylaxis pre-operatively** in Operating Room based on Caprini score as described in table below with attention to patient considerations listed.

| Total Score | DVT Rate | Prophylaxis |
|----------------|----------|--|
| 1-2 | 1.5% | Early Ambulation |
| 3-4 | 3% | SCD's intraoperatively and continue until patient is ambulatory + Dalteparin 5,000 units subcutaneous daily (during admission to surgical inpatients) |
| Greater than 5 | 6% | SCD's intraoperatively and continue until patient is ambulatory + Dalteparin 5,000 units subcutaneous daily (during admission to surgical inpatients) |

Patient considerations for low molecular weight heparin dosing:

- **Low weight dosing:** (less than 40 kg) Dalteparin 2,500 units subcutaneous daily
 - **High weight dosing:** (greater than 100 kg) Dalteparin 5,000 units subcutaneous twice a day
 - **Epidural:** Administer heparin 5,000 units subcutaneous **1 hour after epidural**,
Then Heparin 5,000 units subcutaneous every 8 hours on day of surgery,
Then switch to Dalteparin _____ units subcutaneous _____ on post-op Day 1 as per weight considerations noted above and continue daily during admission to surgical inpatients
- ✓ Refer to the Halton Healthcare Venous Thromboembolism (VTE) Prophylaxis for Post-Operative Surgical Inpatients (Non-Orthopaedic) Order Set (# H3960)

C) Modified Risk with Extended Treatment for 28 days

- Consider extended treatment of low molecular weight heparin dosing 28 days after surgery for patients with a Caprini score greater than or equal to 9

| Baseline Risk Score | VTE within Hospital Prophylaxis | Extended Treatment For 28 days |
|---------------------|---------------------------------|--------------------------------|
| High 9 + | 6% | 1.2% |