

Venous Thromboembolism (VTE) Evaluation Criteria Algorithm

Evidence Based Outcomes Center

Inclusion Criteria: All DCMC admitted patients ≥ 12 years

Screening to begin on 1st full day of admission

Mobility
1 Evaluate for mobility compared to patient's normal baseline

Key Risk Factors
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Encourage/Facilitate Mobility
All patients should be encouraged to achieve the highest degree of mobility
Obtain PT consult for all moderate and high risk patients

Baseline Mobility

- Patient's usual state of ambulation
- If patient's baseline mobility is altered prior to admission (i.e. wheelchair bound) then their mobility would not be considered altered

Altered Mobility

- A temporary inability to ambulate freely (i.e. bathroom privileges only, or needs assistance to transfer to chair or ambulate)

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Pharmacological Prophylaxis Contraindications

- Unable to maintain platelet count ≥ 50K/microL
- CNS bleed (unless approved by Neurosurgery) - Spinal hematoma, Intracranial hemorrhage, CNS disorder with high risk of bleeding (Including but not limited to AVM, aneurysm, CNS mass or Moya Moya)
- Ongoing or uncontrolled bleeding - Including Solid Organ Injury
- Known Bleeding Disorder (von Willebrand (vW) disease, Hemophilia A/B, known platelet dysfunction disorder)
- History of heparin-induced thrombocytopenia or allergy to Heparin
- Perioperative considerations
 - Surgical procedure scheduled within 24 hours
 - Postoperative patient within 72 hrs. of surgery (unless cleared by surgeon)
 - Postoperative patient within 96 hrs. of Neurosurgery (unless cleared by Neurosurgery)
- Uncontrolled Hypertension (≥ 140/90)
- Epidural catheter in place or recent removal (< 12 hours) (unless approved by anesthesia)

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Moderate Risk
Altered Mobility **AND**
0 VTE Risk Factors 1
- OR -
Baseline Mobility **AND**
≥ 1 VTE Risk Factor

High Risk
Altered Mobility **AND**
≥ 1 VTE Risk Factor 1
Do BOTH prophy meds and SCDs

Mechanical Prophylaxis
Sequential Compression Device (SCD) 3

Pharmacological Prophylaxis 2
Consult Hematology 3
Mechanical Prophylaxis 3
Sequential Compression Device (SCD)

Continue to Evaluate Daily

Mechanical Prophylaxis Contraindications

- If one extremity is not available for use, the other extremity should be considered if not affected.
- Lower extremity conditions which result in significant pain with compression (e.g. solid tumor, vaso-occlusive pain episode in sickle cell disease)
- Extremity to be used has acute fracture or patient at high risk of fracture (e.g. osteogenesis imperfecta)
- Skin conditions affecting extremity (e.g., dermatitis, burns, recent skin graft, wound)
- Extremity has distal PIV
- DVT Suspected or existing in lower extremity (can place on contralateral limb)
- Unable to achieve fit due to size
- Concern SCD could be used to cause self-harm

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Key Risk Factors

High Risk Medications

- High risk medications
 - Asparaginase use within past 2 months
 - Estrogen use within past 2 months (oral contraceptives, patch, nuvaring, intradermal implant)

Historical Conditions

- Personal history of DVT/PE, VTE, stroke, or venous sinus thrombosis
- Family hx of DVT/PE, VTE in 1st degree relative <50 years old or multiple relatives of any age

Acute Conditions

- Sepsis or other high risk infection (CNS/head/neck infection, endocarditis, intra-abdominal or thoracic abscess, bone/joint infection, pneumonia)
- Active Cancer
- Pregnancy
- Active autoimmune or rheumatologic disease
- Severe dehydration
- Major surgery within the past 30 days
- Critically ill (in ICU)
- Cardiac Disease (cardiomyopathy, Afib, single ventricle physiology and palliative surgery shunts)
- Major Trauma: TBI, Spinal cord Injury
- Orthopedic Injury (> 1 lower extremity fracture/complex pelvic fracture)
- Orthopedic surgery of hip, knee, spine

Chronic Conditions

- Obesity
 - Under 18 years: BMI > 95th percentile for age
 - Over 18 years: BMI > 30
- Inflammatory disorders - e.g., autoimmune disorders, SLE, IBD
- Thrombophilia
 - Inherited: e.g., Factor V Leiden, Prothrombin mutation, Antithrombin deficiency
 - Acquired: e.g., Antiphospholipid syndrome or protein losing disorders (nephrotic syndrome, PLE, chylous effusion)
- Sickle cell disease (SCD)

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*Initial Dosing of Enoxaparin: Please refer to Enoxaparin Pedi/Neo Prophylaxis/Treatment Power Plan

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