VTE Risk Assessment and Prophylaxis Process

Inclusion Criteria: Age ≥ 12 yrs admitted to an inpatient unit excluding oncology

Start

Active clot or receiving anticoagulant

Yes

High Risk Consult Hematology

No

Personal history of VTE/stroke/MI/thrombophilia

Yes

High Risk Consult Hematology

No

Presence of central venous catheter

Yes

Presence of additional risk factors

Yes

High Risk Consult Hematology

No

Moderate risk
Early ambulation, range of motion, sequential compression devices (SCDs) if no contraindication

No

Moderate risk
Early ambulation, range of motion, sequential compression devices (SCDs) if no contraindication

Yes

Presence of additional risk factors

Yes

No

Low Risk
No interventions necessary

No

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## Pediatric Venous Thromboembolism (VTE) Prophylaxis Guideline

### Patients To Be Screened for Risk - ≥12 yrs on admission, upon change to higher level of care, every 7 days

#### Prophylaxis Assessment

<table>
<thead>
<tr>
<th>Low Risk</th>
<th>Moderate Risk</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without altered mobility and no additional risk factors</td>
<td>Altered mobility (Braden activity score 1 or 2) AND/OR central venous catheter with no additional risk factors</td>
<td>Active clot, receiving an anticoagulant, personal history of VTE, stroke, MI, Thrombophilia OR central venous catheter with additional risk factors</td>
</tr>
</tbody>
</table>

#### Recommended Prophylaxis

<table>
<thead>
<tr>
<th>Low Risk</th>
<th>Moderate Risk</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Ambulation and/or ROM</td>
<td>Early Ambulation and/or ROM AND Sequential Compression Devices</td>
<td>Mobility as tolerated (active or passive) AND Sequential Compression Devices AND Hematology Consult</td>
</tr>
</tbody>
</table>

### Additional VTE Risk Factors

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Thrombophilia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute infection (e.g. bacteremia, meningitis)</td>
<td>Factor V Leiden</td>
</tr>
<tr>
<td>Cardiac disease: single ventricle pathology or arrhythmias</td>
<td>Prothrombin mutation</td>
</tr>
<tr>
<td>Estrogen supplementation</td>
<td>Protein C deficiency</td>
</tr>
<tr>
<td>Major surgery (e.g. open abdominal, pelvis, spine)</td>
<td>Protein S deficiency</td>
</tr>
<tr>
<td>Major trauma (e.g. spine, lower extremities)</td>
<td>Antithrombin deficiency</td>
</tr>
<tr>
<td>Nephrotic syndrome</td>
<td>Antiphospholipid antibody positivity</td>
</tr>
<tr>
<td>Obesity (&gt; 90th percentile for age)</td>
<td>Hyperhomocysteinemia</td>
</tr>
<tr>
<td>Systemic inflammation (e.g. lupus, inflammatory bowel disease)</td>
<td>Elevated lipoprotein(a)</td>
</tr>
<tr>
<td></td>
<td>Elevated Factor VIII</td>
</tr>
</tbody>
</table>

### Relative Contraindications to Pharmacologic Prophylaxis

Ongoing and uncontrolled bleeding, prior history of unexplained spontaneous hemorrhage
Uncorrected coagulopathy incl. but not limited to: platelet count < 50,000, fibrinogen < 100, prolonged PT or APTT
Neurosurgery, serious head trauma, or large-territory arterial ischemic stroke during prior 7 days.
Known AVM, aneurynsm, CNS mass, or moyamoya
Anticoagulated patient
Aspirin or other irreversible platelet inhibitor use within preceding 7 days
Known bleeding disorder/tendency
Uncontrolled hypertension

### Absolute Contraindications to Pharmacologic Prophylaxis

Perioperative/trauma patient with lack of approval by surgeon for prophylactic anticoagulation
Epidual catheter w/in 24 hours or 12 hrs post LP
Invasive surgical procedure during prior 48 hrs

### Contraindications to Sequential Compression Devices

Suspected or existing deep vein thrombosis (can use graduated compression stockings)
Extremity with IV access
Skin conditions affecting extremity (e.g. dermatitis, burns, recent skin grafts, leg wounds)
Acute fracture
Unable to achieve correct fit due to patient size
Allergy to garment fabric

Revised EBM Committee 7-19-17
References

Prevention of Venous Thromboembolism


7-17-17