### PROXIMAL DEEP VEIN THROMBOSIS (PDVT) CLINICAL DECISION RULE

**Facts**

<table>
<thead>
<tr>
<th>Proximal</th>
<th>Distal</th>
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<tbody>
<tr>
<td>• Affecting popliteal or femoral veins</td>
<td>• Calf veins</td>
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<tr>
<td>• 5.1% fatality rate following anticoagulant therapy</td>
<td>• Can dislodge and cause a PDVT and/or pulmonary embolism (PE)</td>
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<tr>
<td>• Studies indicate that physical therapist may underestimate the probability of the PDVT by as much as 87%-64%</td>
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**Risk Factors**

<table>
<thead>
<tr>
<th>Strong</th>
<th>Moderate</th>
<th>Weak</th>
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<tbody>
<tr>
<td>• Fracture (pelvis, femur, tibia)</td>
<td>• Arthroscopic knee surgery</td>
<td>• Bed rest &gt; 3 days</td>
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<tr>
<td>• Hip or knee replacement</td>
<td>• Central venous lines</td>
<td>• Immobility due to sitting</td>
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<tr>
<td>• Major general surgery</td>
<td>• Chemotherapy</td>
<td>• Increasing age</td>
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<tr>
<td>• Major trauma</td>
<td>• Congestive heart or respirator failure</td>
<td>• Laproscopic surgery</td>
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<td></td>
<td>• Malignancy</td>
<td>• Obesity</td>
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<td></td>
<td>• Oral contraceptive therapy</td>
<td>• Varicose veins</td>
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<td></td>
<td>• Cerebrovascular accident</td>
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<td></td>
<td>• Pregnancy/postpartum</td>
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<td></td>
<td>• Previous venous thromboembolism</td>
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</tbody>
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**Conditions that may mimic PDVT**

<table>
<thead>
<tr>
<th>Category of Condition</th>
<th>Specific Examples</th>
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<tbody>
<tr>
<td>Musculoskeletal</td>
<td>Trauma, hematoma, myositis, tendonitis, baker’s cyst, synovitis, OA, osteomyolitis, tumors, fractures</td>
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<tr>
<td>Neurological</td>
<td>Sciatica, lower-limb paralysis</td>
</tr>
<tr>
<td>Venous</td>
<td>Phlebitis, postthromboic syndrome, compressed veins</td>
</tr>
<tr>
<td>Arterial</td>
<td>Acute arterial occlusions, a-v fistula</td>
</tr>
<tr>
<td>Generalized edema</td>
<td>Cardiogenic, nephrogenic, dysprotnemnic</td>
</tr>
<tr>
<td>Cutaneous</td>
<td>Dermatitis, cellulites, lipoedema, panniculitis</td>
</tr>
<tr>
<td>Localized edema</td>
<td>Pregnancy, oral contraceptives, limb immobilization</td>
</tr>
<tr>
<td>Clinical Finding</td>
<td>Score&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>-------------------</td>
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<tr>
<td>Active cancer (within 6 months diagnosis or palliative care)</td>
<td>1</td>
</tr>
<tr>
<td>Paralysis, paresis, or recent plaster immobilizations of LE</td>
<td>1</td>
</tr>
<tr>
<td>Recently bedridden &gt; 3 months or major surgery within 4 weeks of application of clinical decision rule</td>
<td>1</td>
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<tr>
<td>Localized tenderness along distribution of deep venous system&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1</td>
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<tr>
<td>Entire lower extremity swelling</td>
<td>1</td>
</tr>
<tr>
<td>Calf swelling by &gt; 3cm compared with asymptomatic lower extremity&lt;sup&gt;c&lt;/sup&gt;</td>
<td>1</td>
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<tr>
<td>Pitting edema (greater in symptomatic lower extremity)</td>
<td>1</td>
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<tr>
<td>Collateral superficial veins (nonvaricose)</td>
<td>1</td>
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<tr>
<td>Alternative diagnosis as likely or greater than that of deep vein thrombosis&lt;sup&gt;d&lt;/sup&gt;</td>
<td>-2</td>
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<sup>a</sup>Score interpretation: Greater than or equal 0 = probability of proximal lower extremity deep vein thrombosis (PDVT) of 3% (95% confidence interval [CI] = 1.7%-5.9%), 1 or 2 = probability of PDVT of 17% (95% CI = 12-23%), Greater than or equal to 3 = probability of PDVT of 75% (95% CI = 63-84%).

<sup>b</sup>Tenderness along the deep venous system is assessed by firm palpation in the center of the posterior calf, the popliteal space, and along the area of the femoral vein in the anterior thigh and groin.

<sup>c</sup>Measured 10 cm below tibial tuberosity

<sup>d</sup>Most common alternative diagnosis are cellulites, calf strain, and postoperative swelling

- Although the clinical diagnosis rule is a valid and reliable tool, all patients who are suspected of having PDVT should have their physician contacted by the physical therapist and undergo formal diagnostic testing even if the risk of PDVT is low.

References
