American College of Radiology  
ACR Appropriateness Criteria®  

Suspected Upper-Extremity Deep Vein Thrombosis  

**Variant 1:** Suspected upper-extremity deep vein thrombosis. Initial imaging.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>SOE</th>
<th>Adults RRL</th>
<th>Peds RRL [ped]</th>
<th>Rating</th>
<th>Median</th>
<th>Final Tabulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>US duplex Doppler upper extremity</td>
<td>Usually appropriate</td>
<td>Expert Consensus</td>
<td>0 0 mSv</td>
<td>0 0 mSv</td>
<td>9</td>
<td>9</td>
<td>0 0 0 0 0 0 0 2 13</td>
</tr>
<tr>
<td>CTV upper extremity with IV contrast</td>
<td>May be appropriate</td>
<td>Expert Consensus</td>
<td>☢☢☢ 10-30 mSv</td>
<td>0 0 mSv</td>
<td>6</td>
<td>6</td>
<td>0 1 0 0 4 4 5 1 0</td>
</tr>
<tr>
<td>MRV upper extremity without and with IV contrast</td>
<td>May be appropriate</td>
<td>Expert Consensus</td>
<td>0 0 mSv</td>
<td>0 0 mSv</td>
<td>6</td>
<td>6</td>
<td>0 0 1 1 3 6 4 0 0</td>
</tr>
<tr>
<td>MRV upper extremity without IV contrast</td>
<td>May be appropriate</td>
<td>Expert Consensus</td>
<td>0 0 mSv</td>
<td>0 0 mSv</td>
<td>5</td>
<td>5</td>
<td>0 1 0 6 5 3 0 0 0</td>
</tr>
<tr>
<td>Catheter venography upper extremity</td>
<td>Usually not appropriate</td>
<td>Expert Consensus</td>
<td>☢☢ 1-10 mSv</td>
<td></td>
<td>3</td>
<td>3</td>
<td>3 4 3 4 1 0 0 0 0</td>
</tr>
<tr>
<td>Nuclear medicine venography upper extremity</td>
<td>Usually not appropriate</td>
<td>Expert Consensus</td>
<td>☢☢ 1-10 mSv</td>
<td></td>
<td>3</td>
<td>3</td>
<td>5 2 5 0 2 1 0 0 0</td>
</tr>
<tr>
<td>Radiography chest</td>
<td>Usually not appropriate</td>
<td>Expert Consensus</td>
<td>&lt;0.1 mSv</td>
<td>&lt;0.03 mSv [ped]</td>
<td>2</td>
<td>2</td>
<td>5 5 4 1 0 0 0 0 0</td>
</tr>
</tbody>
</table>

**Not applicable:**  
- Catheter venography upper extremity: <0.1 mSv [ped]  
- Nuclear medicine venography upper extremity: <0.1 mSv [ped]  
- Radiography chest: <0.1 mSv [ped]  

**Categories:**  
- **SOE:** Standard of Opinion  
- **Adults RRL:** Relative Reporting Level  
- **Peds RRL [ped]:** Relative Reporting Level [pediatric]  
- **Rating:** 1-9, with 9 indicating the most appropriate.
Appendix Key
A more complete discussion of the items presented below can be found by accessing the supporting documents at the designated hyperlinks.

Appropriateness Category: The panel's recommendation for a procedure based on the assessment of the risks and benefits of performing the procedure for the specified clinical scenario.

SOE: Strength of Evidence. The assessment of the amount and quality of evidence found in the peer reviewed medical literature for an appropriateness recommendation.

- References: The citation number and PMID for the reference(s) associated with the recommendation.
- Study Quality: The assessment of the quality of an individual reference based on the number of study quality elements described in the reference.

RRL: Relative Radiation Level. A population based assessment of the amount of radiation a typical patient may be exposed to during the specified procedure.

Rating: The final rating (1-9 scale) for the procedure as determined by the panel during rating rounds.

Median: The median rating (1-9 scale) for the procedure as determined by the panel during rating rounds.

Final tabulations: A histogram showing the number of panel members who rated the procedure as noted in the column heading (ie, 1, 2, 3, etc.).

Additional supporting documents about the AC methodology and processes can be found at www.acr.org/ac.