## Radiologic Management of Mesenteric Ischemia

### Variant 1:
Patient with recent onset abdominal pain, no peritoneal signs, known atrial fibrillation. CTA shows filling defect in proximal SMA consistent with embolus.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>SOE</th>
<th>RRL</th>
<th>Panel Rating</th>
<th>Group Median Rating</th>
<th>Final Tabulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical embolectomy</td>
<td>May be appropriate</td>
<td>TBD TBD</td>
<td>5</td>
<td>n/a</td>
<td></td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>References</td>
<td>Study Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systemic anticoagulation</td>
<td>Usually appropriate</td>
<td>TBD TBD</td>
<td>8</td>
<td>n/a</td>
<td></td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>References</td>
<td>Study Quality</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Transcatheter thrombolysis</td>
<td>Usually appropriate</td>
<td>TBD TBD</td>
<td>7</td>
<td>n/a</td>
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<tr>
<td>References</td>
<td>Study Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Angiography and aspiration embolectomy</td>
<td>Usually appropriate</td>
<td>TBD TBD</td>
<td>7</td>
<td>n/a</td>
<td></td>
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</tr>
<tr>
<td>References</td>
<td>Study Quality</td>
<td></td>
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</tr>
</tbody>
</table>

### Variant 2:
Patient with recent onset abdominal pain, no peritoneal signs, known atrial fibrillation. CTA shows calcified atherosclerotic plaque involving the aorta and its major branches, as well as proximal short-segment occlusion of the proximal SMA.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>SOE</th>
<th>RRL</th>
<th>Panel Rating</th>
<th>Group Median Rating</th>
<th>Final Tabulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systemic anticoagulation</td>
<td>Usually appropriate</td>
<td>TBD TBD</td>
<td>8</td>
<td>n/a</td>
<td></td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>References</td>
<td>Study Quality</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Surgical endarterectomy or bypass</td>
<td>May be appropriate</td>
<td>TBD TBD</td>
<td>6</td>
<td>n/a</td>
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<td>References</td>
<td>Study Quality</td>
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<tr>
<td>Procedure</td>
<td>Appropriateness</td>
<td>References</td>
<td>Study Quality</td>
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<tr>
<td>----------------------------------------------------------------------------</td>
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<tr>
<td>Angiography and transcatheater thrombolysis followed by percutaneous transluminal angioplasty and stent placement</td>
<td>Usually appropriate</td>
<td>8</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Variant 3:** Hospitalized patient with cardiac disease causing low cardiac output who developed abdominal pain but without peritoneal signs. CT angiogram shows patent origins and proximal portions of celiac artery, SMA, and IMA, with diffuse irregular narrowing of SMA branches.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Appropriateness</th>
<th>References</th>
<th>Study Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systemic anticoagulation</td>
<td>Usually appropriate</td>
<td>TBD TBD</td>
<td>7</td>
</tr>
<tr>
<td>Systemic infusion of prostaglandin E1</td>
<td>Usually appropriate</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>Angiography with infusion of vasodilator</td>
<td>Usually appropriate</td>
<td>TBD TBD</td>
<td>8</td>
</tr>
</tbody>
</table>

**Variant 4:** Patient with history of abdominal pain after meals for the past few months and weight loss. CTA shows aortic atherosclerotic disease and suggests SMA-origin stenosis with occlusion of celiac origin and an occluded IMA.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Appropriateness</th>
<th>References</th>
<th>Study Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systemic anticoagulation</td>
<td>May be appropriate</td>
<td>TBD TBD</td>
<td>5</td>
</tr>
<tr>
<td>Surgical bypass or endarterectomy</td>
<td>Usually appropriate</td>
<td>TBD TBD</td>
<td>7</td>
</tr>
<tr>
<td>Angiography with possible percutaneous transluminal angioplasty and stent placement</td>
<td>Usually appropriate</td>
<td>8</td>
<td>n/a</td>
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</tbody>
</table>
### Variant 5:

Patient with pain after meals and CTA showing widely patent origins of SMA and IMA, with possible compression of the celiac origin by the median arcuate ligament.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Study Quality</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Systemic anticoagulation</strong></td>
<td>Usually not appropriate</td>
<td>TBD TBD</td>
</tr>
<tr>
<td><strong>Surgery with median arcuate ligament release, with or without bypass</strong></td>
<td>Usually appropriate</td>
<td>TBD TBD</td>
</tr>
<tr>
<td><strong>Supportive measures only</strong> (<strong>analgesics</strong>)</td>
<td>Usually appropriate</td>
<td>TBD TBD</td>
</tr>
<tr>
<td><strong>Percutaneous transluminal angioplasty with stent placement</strong></td>
<td>May be appropriate</td>
<td>TBD TBD</td>
</tr>
<tr>
<td><strong>Mesenteric angiography in lateral projection during both inspiration and expiration</strong></td>
<td>Usually appropriate</td>
<td>TBD TBD</td>
</tr>
</tbody>
</table>

### Variant 6:

Previously healthy patient with worsening diffuse abdominal pain for 2 weeks. CTA shows occlusion of the superior mesenteric vein and its major tributaries. Small bowel appears normal.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Study Quality</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transhepatic superior mesenteric vein catheterization and thrombolytic infusion</strong></td>
<td>Usually appropriate</td>
<td>TBD TBD</td>
</tr>
<tr>
<td><strong>Systemic anticoagulation</strong></td>
<td>Usually appropriate</td>
<td>TBD TBD</td>
</tr>
<tr>
<td>Surgical thrombectomy</td>
<td>References</td>
<td>Study Quality</td>
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<tr>
<td>-----------------------</td>
<td>------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Usually not appropriate</td>
<td>3</td>
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</table>

<table>
<thead>
<tr>
<th>SMA angiography followed by thrombolytic infusion</th>
<th>References</th>
<th>Study Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>May be appropriate</td>
<td>TBD TBD</td>
<td>4</td>
</tr>
</tbody>
</table>
Please refer to the supporting documentation for a more complete discussion of the concepts and their definitions below.

**Final Tabulations:** A histogram of the number of panel members who rated the recommendation as noted in the column heading (ie, 1, 2, 3, …etc.)

**Disagree:** The variation of the individual ratings from the median rating indicates panel disagreement on the final recommendation.

**References:** Lists the references associated with the recommendation.

**SQ:** Study Quality (1, 2, 3, 4, Good M or Inadequate M) of the references listed.

**RRL:** Information on the Relative Radiation Level (RRL) designations can be found.