TREATMENT OF BLUNT CEREBRAL VASCULAR INJURY

***Initiation of any anticoagulation /antiplatelets must be cleared with Attending***

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**Injury Grades**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>I</td>
<td>Luminal irregularity or dissection/intramural hematoma with &lt;25% luminal narrowing</td>
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<tr>
<td>II</td>
<td>Dissection or intramural hematoma of ≥25% of lumen</td>
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<tr>
<td>IIa</td>
<td>Dissection or intramural hematoma of 25-50% of the lumen</td>
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<tr>
<td>IIb</td>
<td>Dissection or intramural hematoma of ≥50% of the lumen or intimal flap</td>
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<tr>
<td>III</td>
<td>Pseudo aneurysm</td>
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<tr>
<td>IV</td>
<td>Vessel occlusion</td>
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<tr>
<td>V</td>
<td>Vessel transection</td>
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</tbody>
</table>

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**CTA Positive**

- **Grade I & II**
  - ASA
  - Repeat Imaging
    - 3 month
  - **Heparin:** Use the LOW intensity scale
    - No bolus
    - PTT goal 40-50
  - Or if a contraindication to Heparin
    - Aspirin
    - CTA—angio 7-10 days

- **III**
  - Consult Neuro/IR

- **IV**
  - Consult Neuro/IR
  - Surgery if accessible or Stent with Aspirin and/or Plavix

- **CTA or Angio at 7 days – 10 days**
  - If resolved, stop treatment
  - If remaining – change to aspirin, treatment 3-6 months then re-image CTA
    - If remaining—Aspirin lifelong

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Updated 07/01/2014
Updated 5/2016
Reviewed 1/14/17
Reviewed 9/5/2018
Reviewed 3/6/2019
Reviewed 1/28/2021