TREATMENT OF BLUNT CEREBRAL VASCULAR INJURY

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

**Injury Grades**

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

- **CTA Positive**
  - Grade I & II: Consult Neuro/IR
  - Grade III & IV: Consult Neuro/IR
  - Grade V: 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

- **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

- **CTA Positive**
- **Grade V** Consult Neuro/IR
- **Surgery if accessible** or Stent with Aspirin and/or Plavix

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