**Supplemental Material C**

**Question**:

“My decision making regarding \_\_\_\_\_\_ (screening/treatment/follow-up) for extracranial traumatic vertebral artery injury is evidenced-based, as opposed to expert opinion”

|  |  |  |  |
| --- | --- | --- | --- |
|  | Screening (%) | Treatment (%) | Follow-up (%) |
| Strongly Agree | 6 | 6 | 2 |
| Agree | 20 | 25 | 12 |
| Neither Disagree or Agree | 53 | 47 | 56 |
| Disagree | 20 | 20 | 27 |
| Strongly Disagree | 1 | 2 | 2 |

**Question**:

“If you answered, “I do not use a criterion-based screening tool” in the previous question, please select a corresponding reason:

**Options**:

* Not applicable
* Difficult to remember
* Low yield
* Time consuming
* Other (please specify)

|  |  |
| --- | --- |
|  | % of respondents |
| Difficult to remember | 34 |
| Low yield  | 15 |
| Time consuming | 5 |
| Other (please specify) | 46 |

**Other (please specify):**

|  |  |
| --- | --- |
|  | % of respondents |
| “Not aware of criterion-based screening tool” | 12 |
| Lack of evidence, validation, applicability  | 8 |
| Diagnosis not part of my practice | 10 |
| Ask for stroke neurology assistance | 5 |
| Screen high risk mechanisms | 2 |
| Screen in the presence of cervical fractures | 2 |
| Use clinical judgement | 3 |
| “Patients with suspected eTVAI are screened with CTA” | 2 |
| Didn’t specify an answer | 2 |

**Case 1: Treatment (eTVAI with <25% reduction in lumen diameter without intimal flap)**

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| ASA | 89 |
| Heparin | 1 |
| Plavix | 3 |
| Warfarin | 0 |
| Direct Thrombin Inhibitor | 0 |
| Direct Factor Xa Inhibitor (e.g. Rivaroxaban)  | 0 |
| Endovascular Therapy | 0 |
| Open Surgery | 0 |
| Other (Please Specify) | 7 |

Other specified

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| Consult stroke neurology | 4 |
| “Depends on location of dissection” | 2 |
| “Unaware of treatment strategy to use” | 1 |

**Case 1: Treatment (eTVAI with >25% reduction in lumen diameter with intimal flap)**

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| ASA | 76 |
| Heparin | 4 |
| Plavix | 7 |
| Warfarin | 2 |
| Direct Thrombin Inhibitor | 0 |
| Direct Factor Xa Inhibitor (e.g. Rivaroxaban)  | 0 |
| Endovascular Therapy | 4 |
| Open Surgery | 0 |
| Other (Please Specify) | 8 |

Other specified

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| Consult stroke neurology | 4 |
| “Depends on location of dissection” | 2 |
| “Unaware of treatment strategy to use” | 1 |
| “Would assess intracranial anatomy” | 1 |

**Case 2: Treatment (eTVAI with pseudoaneurysm dissection)**

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| ASA | 50 |
| Heparin | 4 |
| Plavix | 6 |
| Warfarin | 0 |
| Direct Thrombin Inhibitor | 0 |
| Direct Factor Xa Inhibitor (e.g. Rivaroxaban)  | 0 |
| Endovascular Therapy | 33 |
| Open Surgery | 0 |
| Other (Please Specify) | 8 |

Other specified

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| Consult stroke neurology | 4 |
| “Depends on location of dissection” | 4 |
| “Unaware of treatment strategy to use” | 1 |

**Case 1: Overall Duration of Medical treatment (eTVAI with luminal diameter narrowing)**

|  |  |
| --- | --- |
| **Duration of Treatment**  | **%** |
| 1-7 days | 1 |
| 1-4 weeks | 7 |
| 1-3 months | 36 |
| 3-6 months | 46 |
| >6 months | 5 |
| Other (Please Specify) | 6 |

Other specified

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| “Repeat imaging to guide the duration” | 2 |
| “Consult stroke neurology” | 2 |
| “Dual anti-platelets for 3 months, followed by ASA indefinitely” | 1 |
| “Unaware of duration” | 1 |

**Case 2: Overall Duration of Medical treatment (eTVAI with pseudoaneurysm dissection)**

|  |  |
| --- | --- |
| **Duration of Treatment**  | **%** |
| 1-7 days | 3 |
| 1-4 weeks | 5 |
| 1-3 months | 28 |
| 3-6 months | 35 |
| >6 months | 12 |
| Other (Please Specify) | 16 |

Other specified

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| “Depends on follow-up imaging” | 5 |
| “Continue until pseudoaneurysm healed” | 3 |
| “Depends on pseudoaneurysm size” | 2 |
| “Depends on if endovascular therapy is successful” | 2 |
| “Unaware of the duration of treatment” | 2 |
| “Depends on pseudoaneurysm location” | 2 |

**Case 1**

**Frequency of clinical follow-up (eTVAI with <25% luminal diameter reduction and no intimal flap)**

|  |  |
| --- | --- |
| **Duration of Treatment** | **%** |
| 1-7 days | 9 |
| 1-4 weeks | 17 |
| 1-3 months | 43 |
| 3-6 months | 20 |
| >6 months | 0 |
| Other (Please Specify) | 12 |

Other specified

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| “Depends on fracture or trauma care” | 4 |
| “Consult stroke neurology” | 2 |
| “Follow-up interval changes with time” | 2 |
| “Unaware of appropriate time interval” | 1 |

**Case 1**

**Frequency of radiographic follow-up (eTVAI with <25% luminal diameter reduction and no intimal flap)**

|  |  |
| --- | --- |
| **Duration of Treatment** | **%** |
| 1-7 days | 1 |
| 1-4 weeks | 10 |
| 1-3 months | 39 |
| 3-6 months | 39 |
| >6 months | 3 |
| Other (Please Specify) | 6 |

Other specified

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| “Consult stroke neurology” | 4 |
| “Unaware of appropriate time interval” | 2 |

**Case 1**

**Frequency of clinical follow-up (eTVAI with >25% luminal diameter reduction and raised intimal flap)**

|  |  |
| --- | --- |
| **Duration of Treatment** | **%** |
| 1-7 days | 12 |
| 1-4 weeks | 24 |
| 1-3 months | 37 |
| 3-6 months | 19 |
| >6 months | 0 |
| Other (Please Specify) | 6 |

Other specified

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| “Consult stroke neurology” | 4 |
| “Follow-up interval changes with time” | 1 |
| “Unaware of appropriate time interval” | 1 |

**Case 1**

**Frequency of radiographic follow-up (eTVAI with >25% luminal diameter reduction and raised intimal flap)**

|  |  |
| --- | --- |
| **Duration of Treatment** | **%** |
| 1-7 days | 4 |
| 1-4 weeks | 18 |
| 1-3 months | 35 |
| 3-6 months | 32 |
| >6 months | 1 |
| Other (Please Specify) | 6 |

Other specified

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| “Consult stroke neurology” | 4 |
| “Unaware of appropriate time interval” | 1 |
| “Repeat imaging until clinical improvement” | 1 |

**Case 1**

**Overall Duration of clinical and radiographic follow-up**

|  |  |
| --- | --- |
| **Duration of Treatment** | **%** |
| 0-4 weeks | 2 |
| 1-2 months | 7 |
| 3-6 months | 37 |
| 7-12 months | 15 |
| 1-3 years | 12 |
| >3 years | 0 |
| “Until complete regression (regardless of length of time)” | 13 |
| Other (Please Specify) | 12 |

Other specified

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| “No follow-up” | 5 |
| “Discharge from follow-up when dissection is no longer progressing” | 4 |
| “Depends on fracture or trauma related injuries” | 1 |
| “Unaware of the appropriate interval” | 1 |
| “Consult stroke neurology” | 1 |

**Case 2**

**Frequency of clinical follow-up (eTVAI with pseudoaneurysm dissection)**

|  |  |
| --- | --- |
| **Duration of Treatment** | **%** |
| 1-7 days | 10 |
| 1-4 weeks | 25 |
| 1-3 months | 38 |
| 3-6 months | 14 |
| >6 months | 2 |
| Other (Please Specify) | 10 |

Other specified

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| “Consult stroke neurology” | 2 |
| “Follow-up interval changes with time” | 2 |
| “Unaware of appropriate time interval” | 1 |
| “Consult with endovascular team” | 1 |
| “Earlier and later” | 1 |
| “Follow-up for the fracture” | 1 |
| Other not specified | 2 |

**Frequency of radiographic follow-up (eTVAI with pseudoaneurysm dissection)**

|  |  |
| --- | --- |
| **Duration of Treatment** | **%** |
| 1-7 days | 5 |
| 1-4 weeks | 18 |
| 1-3 months | 36 |
| 3-6 months | 25 |
| >6 months | 7 |
| Other (Please Specify) | 9 |

Other specified

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| “Consult stroke neurology” | 4 |
| “Unaware of appropriate time interval” | 1 |
| “Consult with endovascular team” | 1 |
| “Earlier and later” | 1 |
| Other not specified | 2 |

**Case 2**

**Overall Duration of clinical and radiographic follow-up**

|  |  |
| --- | --- |
| **Duration of Treatment** | **%** |
| 0-4 weeks | 0 |
| 1-2 months | 2 |
| 3-6 months | 29 |
| 7-12 months | 16 |
| 1-3 years | 22 |
| >3 years | 1 |
| “Until complete regression (regardless of length of time)” | 14 |
| Other (Please Specify) | 14 |

Other specified

|  |  |
| --- | --- |
| **Treatment Option** | **%** |
| “Discharge from follow-up when dissection is no longer progressing”  | 6 |
| “No follow-up” | 1 |
| “Depends on imaging at follow-up” | 1 |
| “Consult with endovascular team” | 1 |
| “Consult stroke neurology” | 2 |
| “Unaware of appropriate interval” | 1 |
| “Follow-up only if symptomatic” | 1 |
| “Depends on intracranial anatomy” | 1 |