Embolic Protection has been shown to be effective

- Coronary Saphenous Vein Grafts
- Carotid Artery
- Renal Artery
- Why not lower extremity?

In the past ten years, there has been much discussion without consensus regarding use.

Disclosures

Boston Scientific Corporation,
The Medicines Company
Consulting
Shockwave Medical
Membership on Advisory Committee or Review Panels

Distal Embolic Protection For Lower Extremity Interventions: When, Why And How

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Professor of Radiology and Surgery
Vice Chair and Chief, Division of Interventional Radiology
Mount Sinai Health System

Distal Embolic Protection During Percutaneous Revascularization of Intra-Aortic Arterial Occlusive Disease: An Underestimated Phenomenon

Distal Embolic Protection During Femoropopliteal Atherectomy

Debris were retrieved in the filter in each case.

PERIPHERAL VASCULAR DISEASE

Original Studies

Distal Embolic Protection During Femoropopliteal Atherectomy

Debris were retrieved in the filter in each case.
EPD Options

- NAV 6 (Abbott)
  - Short basket, 7.2mm diameter vessels
  - Independent (SS) wire not “connected” to basket advantage
  - Currently off-label use

The SPIDER™ Embolic Protection Device (Medtronic)

- Self-expanding, heparin-coated, nitinol fiber basket
- 3.0-7.0 mm available
- Mounted on 0.014-inch polytetrafluoroethylene-coated stainless steel wire
- Average size of diamond-like openings is 167 to 209 μm
- Monorail recovery catheter
- Now FDA labeled for infrainguinal use with atherectomy

Clinical significance of embolic events in patients undergoing endovascular femoropopliteal interventions with or without embolic protection devices

<table>
<thead>
<tr>
<th>Procedure Characteristics</th>
<th>Mean ± SD or % (n = N)</th>
</tr>
</thead>
<tbody>
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<td>Total procedure time (min)</td>
<td>74.2 ± 28.4 (133)</td>
</tr>
<tr>
<td>Total fluoroscopy time (min)</td>
<td>21.1 ± 9.7 (132)</td>
</tr>
<tr>
<td>Total contrast administered (cm³)</td>
<td>18.2 ± 72.4 (132)</td>
</tr>
<tr>
<td>Visible debris in filter device</td>
<td>38.4% (123/318)</td>
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<td>Adjunctive therapy</td>
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**Clinical Study**

Revascularization for Critical Limb Ischemia Using the SpideeFX Embolic Protection Device in the Below-the-Knee Circulation: Initial Results

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A. The SPIDER™ device during endovascular repair of femoral-tibial bypass.
B. The device was deployed in a tibial vessel.
C. Note the filling defect (arrow) within the device representing embolized material.

More Atherectomy Devices

- Jetstream™ Atherectomy System
- Rotablator™ Rotational Atherectomy System (Boston Scientific)
- Diamondback™ 360™, Stealth™ 360™ Atherectomy System (Cardiovascular Systems, Inc)
- SilverHawk™, TurboHawk™ Plaque Excision System (Covidien)
- Turbo-Elite™ Laser Atherectomy Catheter (Spectranetics)

More Discussion about……..

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Conclusions

- Macroembolization is very frequent in patients undergoing lower extremity interventions for chronic limb ischemia.
- DEP appears to be very effective in capturing macrodebris, and its use is associated with good acute angiographic outcome.
- The clinical significance of these findings needs to be determined in future studies.
- At present, we prefer to use distal embolic protection routinely during critical limb ischemia interventions with single vessel runoff.
- Recommend the use Embolic Protection with caution.
  - devices not designed for use in the Lower Extremity.

Recognize and prepare for No Reflow