Debate: Femoral Vein Stenting Succeeds Under These Conditions.

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- Abbott Vascular
  - Scientific Advisory Board
  - Consulting agreement
  - Speakers fees / Honorarium
- Medtronic
  - Scientific Advisory Board
  - Consulting agreement
  - Speakers fees / Honorarium
  - Research support / REALITY Trial National Co-PI
- Boston Scientific
  - CLI Advisory Board
  - Proctoring and Case Review
  - Honorarium
- Cook Medical

- Isolated iliac venous disease has been shown to be well-treated with endovascular intervention
- Excellent patency rates for isolated iliac stenting and significant clinical improvement in most cases

Iliac Venous Occlusive Disease: Isolated Iliac Stenting

What are the results of infrainguinal stenting?
- Common femoral vein
- Femoral and popliteal vein

Infra-Inguinal Venous Disease:
Stent Placement below the Inguinal Ligament

May Thurner Syndrome
Post-thrombotic Disease
Infra-Inguinal Venous Disease: Common Femoral Vein Stenting

- CFV (above the confluence of the PFV and FV) is often involved in thrombotic occlusion of the iliocaval segments.
- Concern regarding stent fractures and restenosis does not appear to be the same in the CFV as it is in the CFA.

Stenting across the inguinal ligament is less of a concern than leaving untreated stenotic disease.

- Venous stenting across the inguinal ligament:
  - 54-month Secondary Patency
    - Non-thrombotic pts = 100%
    - Thrombotic pts = 84%
    - 177 limbs with stents extending below the CFV
    - No stent fractures in stainless steel braided stents
    - One crushed nitinol stent
    - No increased risk of fracture, ISR > 50%, compression or long-term patency

What are the results of femoral vein and popliteal vein stenting?

- No large data sets to compare to, especially when discussing isolated femoral vein stents or popliteal stents
- Lumen caliber is smaller than iliac segments, and axialization to the profunda or saphenous system may obviate need for femoropopliteal stenting and/or decrease patency rates due to competitive flow.
**Infra-Inguinal Venous Disease:**

*Venous Occlusions: UCLA Experience*

- Venous compression syndromes (66)
- Post-Thrombotic CVOS
  - Patients treated (38)
  - Insufficient follow-up (7)
  - Patients studied (31)
  - 42 Limbs treated

**Infra-Inguinal Venous Disease:**

*Infra-Inguinal Intervention: UCLA Experience*

**Anatomic Lesion Distribution**

<table>
<thead>
<tr>
<th>Lesion</th>
<th>Total limbs</th>
<th>Supra-inguinal (%)</th>
<th>Infra-inguinal (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T velb</td>
<td>62 (45)</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>VA</td>
<td>20 (50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Int.</td>
<td>15 (41)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ext.</td>
<td>4 (11)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
<td>69%</td>
<td>31%</td>
</tr>
</tbody>
</table>

- Majority of patients had component of infra-inguinal intervention

**Infra-Inguinal Venous Disease:**

*Femoral and Popliteal Vein Stenting*

- DVT 3 months ago with occlusion of femoral and popliteal veins
- Axialization of flow to profunda
- Wire traversing femoral vein
- After 24 hrs of EKOS assisted lysis and balloon angioplasty
- Patient now > 3 years s/p intervention and remains patent and free from venous symptoms
Conclusions

- Iliac venous stenting has resulted in excellent patency rates and symptom resolution in patients with venous occlusive disease.

- Extension of braided stainless steel stents below the inguinal ligament into the CFV and FV does not appear to affect patency or lead to compression or stent fractures.

- Data regarding isolated femoropopliteal interventions is limited but anecdotally stenting in these areas does well provided the principle of stenting from healthy inflow to healthy outflow is preserved.