Strategy and technical tips: Endovascular management of TASC D aortoiliac lesions

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Type D Iliac Lesions

- Intra-renal aortic occlusion
- Diffuse aorto-iliac disease
- Diffuse iliac and com fem
- Unilateral occlusion CFA and ext iliac
- Bilateral ext occlusion
- ILiiac in pt with AAA requiring open surgery
Dont forget Surgical Options

aortobifem

AxFem

Fem Fem
Proper Planning is Crucial for Success

- Do what is easiest
- Pre procedure imaging and planning
- Consider all access points
- Consider saving major branches
- Don’t get cheap
- Recreate what god made (y Junction)
- Strongly consider Stent grafts
  - Balloon expandable
  - Self expanding
- Plan for complications
- Stay within yourself
Avoiding Complications

- Consider thrombectomy
- IVUS aorta
- Undersize and dilate further
- Recreate the junction so you can cross over if needed
- Consider atherectomy of common femoral
Prior to Starting
• Have to know what is below
• What access’s can you use
• Consider thrombectomy
• Plan
Chronic Iliac Occlusion

Plan

- What do you need to save?
- What direction?
- What devices do you need to have on hand?
• Don’t extend occlusion
Current Iliac D Endo Issues

• Treatment of bifurcation disease
• CTO
• Stents vs Stent Grafts
N = 106 patients treated with kissing stents
  • 100% technical success
  • No major procedure-related complications
  • Self-expanding stents in 62 (58.5%) and balloon expandable in 44 (41.5%)

Results
  • Follow-up 30.1 +/- 11.1 mo (range, 12-137)
    – Duplex imaging showed restenosis in 15 (14.8%) and occlusion in 4 (4%)
    – Primary patency at 36 months was 79.4%
# Kissing Stents That Cross into Aorta: Technique effects outcome

<table>
<thead>
<tr>
<th>Group</th>
<th>Primary patency</th>
<th>Assisted patency</th>
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</thead>
<tbody>
<tr>
<td>Non-crossing</td>
<td>94.1%</td>
<td>100%</td>
</tr>
<tr>
<td>Crossing</td>
<td>33.2%</td>
<td>45.3%</td>
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Mechanisms of Failure for Kissing Stents

- Rapidly progressive disease proximal or distal to the stents?
- Accelerated intimal hyperplasia?
- Turbulence leading to thrombosis?
Significant Intimal Hyperplasia and Thrombus

One Year BMS Follow-Up

Courtesy of Robert Smouse
Favored Technique
Stent grafts:
Improved outcomes for TASC C and D

No difference in TASC A and B
Case

- Male, Age 60, HTN and CAD, Smoker,
- CLI: toe gangrene
- ABI .28
- CTA
  - Rt common iliac ostial 90%
  - Lt common iliac 100%
  - Lt common femoral stenosis
  - Lt SFA distal 100%
Adopted Strategy: Bilateral iliac stenting with Lt SFA Intervention

**Approach**
- Combination access but be fluid
- PTA iliacs, go to SFA and treat, obtain second access and kiss BES iliacs on the way out
- No thrombectomy
- Common fem atherectomy
- Re-entry device if needed
- SES SFA

**Equipment**
- Braided sheath
- Hydrophilic wires for iliac
- Re-entry CTO device
Adopted Strategy: Bilateral iliac stenting with Lt SFA Intervention

**Rational**

- Poor surgical candidate
- Durable iliac procedure
- Endo outpt and low risk
Care Issues

- Antiplatelet therapy during wound care/surgery
- F/U surveillance
- Nutritional status
Technical Tips for TASC D Iliac Lesions

- Plan well
- Image well
- Cross well
- Expand well
- Follow up with surveillance
Attend live, online

The Global Education Course
for Vascular Medicine and Intervention
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