Endovascular is Preferred for TASC D Aortoiliac Disease

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Disclosure
Peter A. Schneider

I have the following potential conflicts to report:
X Scientific Advisory Board: AbbottVascular
X Endovascular Executive Committee: Cordis
X Royalties: Cook
X Educational programs: Medtronic, Gore
X Steering Committee for VIVA

2008 Consensus on management of TASC lesions

Through 2004

Through 2007
University of Michigan
Burke et al Ann Vasc Surg 2010;24:4
**Aortofemoral Bypass Wins the Patency Argument**

- Mortality: 4.1%
- Major Complications: 16%
- Sexual function
  - Erectile dysfunction in up to 28%
- Length of Stay
- More than half are for claudication

**Iliac Angioplasty and Stent Index Vascular Procedure**

- Iliac stent or Aortofemoral bypass graft
- Endo has lower mortality and morbidity

A systematic review of endovascular treatment for extensive aortoiliac occlusive disease

- Meta-analysis of 1,711 patients
- Mortality 0-6%, Complications 3-45%

Can this rationale be extended to TASC D?
D lesions: Surgery treatment of choice

Aortic Occlusion + Iliac Disease

Focal aortic occlusion: stent or stent-graft
Re-entry devices play a role
Open aorta and one iliac and perform a fem-fem bypass
Endovascular option is poor with flush occlusion at renals

Flush occlusion of the aorta at the renal arteries.
These are dangerous for endo but are also challenging for open.

Diffuse Disease of Both Iliac Arteries

We have the tools to treat this pattern of disease with endovascular, and it could make sense for limb salvage in a critically ill patient.
TASC D: Right foot gangrene
Total body calcification
Awful COPD

Consider femoral endarterectomy combined with inflow iliac stenting.
If contralateral iliac is acceptable, consider a femoral-femoral bypass.

Diffuse Disease of One Iliac That Extends to the Common Femoral

Consider hybrid procedures when common femoral disease is combined with iliac occlusive disease.

C lesions: Surgery preferred unless high risk
D lesions: Surgery treatment of choice
Unilateral occlusion of common and external iliac artery

Cross and recanalize using re-entry device
Fem-fem with inflow iliac PTA on other side

Bilateral occlusion of external iliac artery

Re-entry device may be required
Bilateral external iliac artery stent

Is there an lead-in beak?
Re-entry catheter for aortoiliac occlusions
Most AAA can be repaired with endografts. Poor iliacs can be treated with re-lining or even endoconduits.
**Endoconduit**

- EIA stenosis
- Angioplasty of Stent-graft
- Completion

Courtesy of M. Eskandari

**Endoconduit**

Must have reasonably good sized and healthy common femoral artery.

Angioplasty each end of the graft first.
Use non-compliant balloons.
Graft: Viabahn 11 or 12 Fr delivery

Sizing:
- 7mm PTA for 18-19 Fr OD
- 8mm PTA for 20-21 Fr OD
- 10mm PTA for 22-23 Fr OD
- 12mm PTA for ≥24Fr OD

Cover the epigastric vessels
Cover the internal iliac artery


**Endovascular Treatment of TASC C and D Aortoiliac Lesions**


Combined femoral endarterectomy and iliac stenting
Both common and external iliac lesions in 61%, with occlusion of both in 41%. Primary patency at 5 years=60%

## Endovascular Treatment
### Aortoiliac Lesions: TASC D

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Park et al. JVIR 2007;18:193
Sixt et al. J Endovasc Ther 2008;15:408

## Who Gets Open Surgery?

10-20%

- Aortic disease
- Juxtaposed to renals
- CFA disease
- Especially occlusions
- As part of hybrid
- Endo failures
- Technical failures
- Recurrent stenosis

THANK YOU!