AFX Unibody Bifurcated Endograft (Endologix) to treat patients with TASC D aorto-iliac disease and an AAA: technical tips and results

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CONFLICT OF INTEREST

I have nothing to disclose

Trans-Atlantic Inter-Society Consensus (TASC II) recommend endovascular approach for A & B lesions, while open repair is suggested for C & D

Aorto-iliac occlusive disease (AIOD) plus Abdominal Aortic Aneurysm is considered as a TASC D lesion

Despite TASC II recommendations, several Authors have proposed an Endovascular Approach for TASC D lesions.

Consequently, endovascular treatment (kissing stents and CERAB) for AIOD has become a first-line therapy, providing a less invasive treatment

In 2016, Maldonado first described the potential role of the AFX Unibody Bifurcated Endograft (Endologix) in AIOD

74 TASC D lesions successfully treated

Patients with concomitant AAA>3.5cm were excluded

RATIONALE

To evaluate role of the AFX Unibody Bifurcated Endograft (Endologix) implantation in patients with TASC-D AIOD and coexistent Abdominal Aortic Aneurysms
STUDY POPULATION

January 2013 – December 2016

21 TASC D+AAA out of 93 AIOD patients

Rutherford Category

2:  4pts
3:  14pts
4:  3pts

DEMOGRAPHIC CHARACTERISTICS

21 Patients

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Age</td>
<td>73.6±6.4 (57-89)</td>
</tr>
<tr>
<td>Male Sex</td>
<td>17; 80.9%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>18; 85.7%</td>
</tr>
<tr>
<td>Dyslipidaemia</td>
<td>14; 66.7%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>13; 61.9%</td>
</tr>
<tr>
<td>CAD</td>
<td>9; 42.8%</td>
</tr>
<tr>
<td>COPD</td>
<td>9; 42.9%</td>
</tr>
<tr>
<td>CRI</td>
<td>7; 33.3%</td>
</tr>
<tr>
<td>ASA III/IV</td>
<td>8; 38.1%</td>
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ANATOMICAL CHARACTERISTICS

AAA diameter 36.2±3.8mm
Aortic Bifurcation diameter 13±2.3mm

CIA

4 occlusion (1 bilateral) 14 stenosis

EIA

2 occlusion (no bilateral) 18 stenosis

PROCEDURAL TECHNIQUE

Stenoses → PTA → AFX Implantation

Occlusion → contralateral recanalization* → PTA → AFX Implantation

*In bilateral CIA occlusions, the shorter lesion was approached first in retrograde fashion then the contralateral was recanalized via the same access.

No brachial/axillary access
No re-entry devices

OUTCOME MEASURES

- Clinical* and technical success
- 30-day and midterm patency

*Clinical success was defined as improvement in 2 or more Rutherford Categories

IMMEDIATE RESULTS

Technical and clinical success in all patients

Spts required active suprarenal fixation (4 Endologix, 1 Endurant)

No stent in Common Iliac Artery

18 stents in External Iliac Artery
@ 30-DAY RESULTS

- No high-flow endoleaks
- All AFX devices patent
- All patients improved >2 Rutherford Category

@ MIDTERM RESULTS

(mean follow-up 25.2 ± 11.1 months)

- All treated vessels were patent
- Clinical improvement maintained in all pts

CONCLUSION

Our data seem to support the use of the AFX stent-graft in this subgroup of patients with TASC D AIOD and AAA, with satisfactory midterm results and acceptable risk for patients.