Clinical and technical advantages of parallel grafts in treatment of failed EVAR and Type I endoleaks

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Disclosure

Speaker name:

.................G. Torsello..............................................................

I have the following potential conflicts of interest to report:

☐ Consulting
☐ Employment in industry
☐ Stockholder of a healthcare company
☐ Owner of a healthcare company
☐ Other(s)

☐ I do not have any potential conflict of interest
Treatment options for type I endoleaks

Conversion

Balloon angioplasty

Aortic extension/cuff

Endo-anchors (Aptus)

Bare metal Stents (Palmaz/E-XL)

Onyx

Chimney technique /fenestrated devices
## Indications for Ch-EVAR in pararenal aortic pathologies

<table>
<thead>
<tr>
<th>Indications</th>
<th>N=100 cases</th>
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<tbody>
<tr>
<td><strong>Pararenal AAA</strong></td>
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<tr>
<td>- Symptomatic / ruptured</td>
<td>75 (%)</td>
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<td>- Severe angulation of proximal neck</td>
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<tr>
<td>- Severe tortuosity, stenosis and calcifications of the iliac vessels</td>
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<td><strong>Penetrating atherosclerotic ulcer (PAU)</strong></td>
<td>10 (%)</td>
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<tr>
<td><strong>Type 1a endoleak after EVAR (Talent/Zenith/Jotec endograft)</strong></td>
<td>10 (%)</td>
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<td><strong>Para-anastomotic AAA after open repair</strong></td>
<td>5 (%)</td>
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Type I endoleak after EVAR
Type Ia and Ib endoleak in patient with aorto-iliac tortuosity
Type of endograft and chimney

ENDURANT II, Medtronic
Tube endograft

Advanta V12, Maquet
chimney graft
Overcoming extreme tortuousosity of the aneurysm neck and iliacs

Use of flexible and low-profile abdominal endografts
Triple chimney for endoleak
(migration of a Talent endograft)
Triple chimney for type I endoleak
60% needed total relining of the endograft after using of fenestrated cuff
Fenestrated cuff alone: potential migration?

Late rescue of proximal endograft failure using fenestrated and branched devices

Fig 2. Details of modes of failure of infrarenal endovascular devices described in this report.
FEVAR after EVAR
-Challenging and limitations-

- Exact positioning difficult because of friction in tortuous anatomies and endograft
- Stiff endograft in angulated aortic neck
- Potential graft twisting in kinked iliac arteries or graft limbs
- Cannulation of the branch vessels through struts and fenestrations
Running conclusion

Use of abdominal tubes and chimney grafts for type I EL after **EVAR** reflects a *safe and valide* treatment.

What is the best treatment for chimney-EVAR and type I endoleak?
Late type I EL after chimney-EVAR
Freedom from reinterventions after F-EVAR and Ch-EVAR for type I endoleak

EJVES 2013;46:50-55

J Vasc Surg 2015;62:578-84
Conclusion

Use of abdominal tubes and chimney grafts for type I ELs after EVAR and chimney EVAR is safe and feasible

...in case of sufficient proximal landing zone and use of the appropriate devices

the best treatment
home page: www.gefaesschirurgie-muenster.de

Thank you!