The use of Viabahn in Dialysis Access Intervention

Dr Rob Jones
Interventional Radiologist
Queen Elizabeth Hospital Birmingham UK

LINC 2016
Overview

Where I use Viabahn in dialysis access intervention

Central venous stenosis
AV Graft revision
Cephalic arch stenosis
Rescue situations
Central Venous Stenosis/Occlusion
Treatment options

PTA and/or stent?

PTA
Technical success 70-90%
6 months (23 - 55%), 12 months (12 - 53%)

Bare metal stent
6 months (42 - 89%), 12 months (14 - 73%)

Stent-grafts

190 patients, prospective / randomised

Patency @ 6months 51% vs 23% (p<0.001)
Restenosis @ 6months 78% vs 28% (p<0.001)
Target lesion primary patency
\[ p = 0.008 \]

KDOQI Guideline 6.8.2:
Circuit Primary Patency > 40% at 3 months
AV Graft revision
# Central Vein Evidence

<table>
<thead>
<tr>
<th>Study</th>
<th>n =</th>
<th>Technical Success</th>
<th>Primary Patency 6, 12, 24 months</th>
<th>Primary Assisted Patency 6, 12, 24 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaya-Ayala JE et al J Vasc Surg 2011</td>
<td>25</td>
<td>100%</td>
<td>-, 56%, -, -</td>
<td>-, 86%, -, -</td>
</tr>
<tr>
<td>Kundu S et al CVIR 2011</td>
<td>14</td>
<td>100%</td>
<td>100%, -, -, -</td>
<td>-</td>
</tr>
<tr>
<td>Jones RG et al JVIR 2011</td>
<td>30</td>
<td>100%</td>
<td>81%, 67%, 45%</td>
<td>100%, 80%, 75%</td>
</tr>
<tr>
<td>Verstandig AG et al JVIR 2013</td>
<td>52</td>
<td>100%</td>
<td>60%, 40%, 28%</td>
<td>96%, 94%, 85%</td>
</tr>
</tbody>
</table>
Cephalic Arch Stenosis

Commonest cause of BC AVF failure
Present in 40% of patients
Treatment options

PTA

Viabahn
BMS vs Stent grafts
Prospective trial (n=25)

Primary patency 6, 12 / 12:
BMS = 39, 0%
SG = 82%, 32%

5 patients : PTA
14 patients : Viabahn

Target lesion primary patency 3, 6, 12 / 12:
PTA = 60%, 0%, 0%
Viabahn = 100%, 100% and 29% (p<0.01)
AV access salvage and rescue
Edge-stenosis
The use of Viabahn in Dialysis Access Intervention

Dr Rob Jones
Interventional Radiologist
Queen Elizabeth Hospital Birmingham UK

LINC 2016