Sarah Kattenhorn

Buttonhole PTFE 20

Months on...😊

VASBI, Leeds, Sept 22\textsuperscript{nd} and 23\textsuperscript{rd} 2016
Background

Button Hole technique for AV fistulae is GOOD

- Prolonged life span
- Reduce aneurysms
- Less haematoma
- Less pain
- Less bleeding
- Promotes self-cannulation

BUT – some report more infections
Background

Button Hole technique in AV Grafts is **BAD 😞**
(NB This is not a recommended technique)

- Increased risk of infection? – foreign material
- More severe consequences of infection
- Can they tolerate repeated blunt needling?
  - Will they tear/shred?
Button Hole in AV Grafts: is it really that bad?

• VASBI 2015 I reported our experience of button holing grafts:
  – 5 patients with established button holes
  – 1 forearm PTFE
  – 2 Leg Loops
  – 2 UA PTFE

• Total weeks experience was: 88
Progress to date

- Number of patients
- Number of complications
  - Infection
  - Clotted
  - Stenosis
  - Any other
- Number of procedures
  - Any procedure
## Progress to date

<table>
<thead>
<tr>
<th>Patient</th>
<th>Graft</th>
<th>Drop out Date</th>
<th>Graft Age (weeks)</th>
<th>Button hole length (weeks)</th>
<th>No. BH interventions</th>
<th>Weeks to first Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FA</td>
<td></td>
<td>353.57</td>
<td>41.57</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Leg</td>
<td></td>
<td>304.29</td>
<td>39.71</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Leg</td>
<td>20/11/2015</td>
<td>207.71</td>
<td>79.43</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>Leg</td>
<td></td>
<td>197.71</td>
<td>6.00</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>UA</td>
<td></td>
<td>143.86</td>
<td>50.71</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>Leg</td>
<td></td>
<td>107.86</td>
<td>90.00</td>
<td>1</td>
<td>80</td>
</tr>
<tr>
<td>7</td>
<td>Leg</td>
<td></td>
<td>61.86</td>
<td>14.57</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Leg</td>
<td>14/04/2016</td>
<td>61.71</td>
<td>48.86</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>UA</td>
<td></td>
<td>51.86</td>
<td>45.86</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Leg</td>
<td></td>
<td>37.86</td>
<td>10.00</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Leg</td>
<td></td>
<td>29.86</td>
<td>26.71</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Leg</td>
<td>03/07/2016</td>
<td>6.86</td>
<td>4.71</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>UA</td>
<td>18/06/2016</td>
<td>Unknown</td>
<td>20.86</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>14</td>
<td>L UA</td>
<td></td>
<td>8.71</td>
<td>5.29</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**Total no. Patients:**
14

**Total no. of weeks:**
484

**Total no. of interventions:**
5

**Weeks per intervention:**
97

---

Not one single BH infective complication in 484 weeks
Drop out reasons

- RIP Chest infection
- RIP Ischaemic heart disease
- Graft removed due to abscess adjacent to incision site causing infection
- 1 patient choice preferred rope ladder
In patients purely Button Holed:

• 82 weeks of BH life
• No infections to date
• No interventions
How does this compare to Rope Laddering Grafts?

• Currently 36 patients rope laddering PTFE grafts
  – 5488 weeks
  – 87 interventions
  – 2 infections (grafts excised)
  – Weeks per intervention 63
Discussion

Button Hole in AV Grafts: is it really that bad?

• Limitations
  – Single centre experience
  – Still (relatively) small numbers?
  – Possible selection bias (we try not to)?

• Is the data convincing yet or have we been lucky?
• Do we need more data?
• If so, what data? Trials or more units trying it?
Conclusions

Our experience suggests:

1. Using Button Hole technique in AV grafts is safe
2. Button hole method appears to prolong AV graft patency
18months on! Button Hole or........

September 2015

September 2016
bad area puncture?
Thank you for your attention!