A pain in the buttock: Iliac branch devices versus internal iliac artery embolization during elective infrarenal EVAR

Somerset and North Devon Regional Vascular Centre
Disclosure

Speaker name:
Natasha Chinai..................................................................

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): Financial support from COOK Medical to attend LINC 2016

- I do not have any potential conflict of interest
Background

- Suitability for successful EVAR depends on aneurysm morphology
- Ectatic or aneurysmal iliac arteries compromise the success of endovascular repair due to inadequate distal sealing
- Embolisation of the internal iliac artery (IIA) is associated with morbidity and disability
Objective

• Aim: To compare Iliac Branch Device and internal iliac artery embolization in patients undergoing EVAR

• Outcomes: morbidity and quality of life
Methods

• All patients undergoing EVAR with internal iliac adjunct over a 4-year period were identified from prospective local and national databases

• Case notes and procedural images were reviewed

• Telephone follow up to assess post-operative symptoms and impact on quality of life (QoL)
  – QoL scores: Walking Impairment Questionnaire, SF-12 and EQ5D
Results

- 237 infrarenal EVARs
- 28 patients had adjunctive procedure to IIA

<table>
<thead>
<tr>
<th></th>
<th>IBD group</th>
<th>IIA emb group</th>
</tr>
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<tbody>
<tr>
<td>Age (years)</td>
<td>71.5±7.2</td>
<td>80.1±6.2</td>
</tr>
<tr>
<td>Male (n)</td>
<td>12</td>
<td>15</td>
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### Morbidity

<table>
<thead>
<tr>
<th>Complication</th>
<th>IBD group</th>
<th>IIA emb group</th>
<th>P</th>
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<tbody>
<tr>
<td>New Erectile dysfunction</td>
<td>0</td>
<td>4</td>
<td>0.06</td>
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<tr>
<td>Ipsilateral buttock claudication</td>
<td>1</td>
<td>8</td>
<td>0.03</td>
</tr>
</tbody>
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#### Walking Impairment Questionnaire

- **Distance**
  - IBD
  - IIA

- **Speed**
  - IBD
  - IIA

- **Stairs**
  - IBD
  - IIA
Quality of Life – EQ5D

- Mobility
- Self-care
- Usual Activities
- Pain/Discomfort
- Anxiety/Depression

IBD
IIA
Embolization
Conclusions

• Sacrificing the internal iliac artery is associated with disabling buttock claudication

• Preserving pelvic perfusion with the successful deployment of an IBD is effective in reducing morbidity

• IBDs provide a safe and effective alternative to treating patients with aorto-iliac aneurysms
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