Uterine Artery Embolisation
Experience in a UK Tertiary Referral Centre
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Declaration of Interests

- None
• Area - 2029 KM²
• Population - 2.2 Million
Leeds Teaching Hospitals

- England’s largest provider of specialist services
- 2,500 inpatient beds
- 14,000 Staff
- 6 sites across Leeds
- 1 million patients annually
UAE Safety & Evidence

- RCOG estimates over 100,000 UAEs since 1991.
- Cochrane Review (2014)
  - "UAE offers an advantage over hysterectomy with regards to a shorter hospital stay and a quicker return to routine activities.
- There is no evidence of benefit of UAE compared to surgery (hysterectomy / myomectomy) for satisfaction.
- The higher minor complications rate after discharge in the UAE group as well as the unscheduled visits and readmission rates require more longer term follow-up trials to comment on its effectiveness and safety profile."
EMMY Trial

5 Year Follow-Up
Reintervention rates,
Menorrhagia,
QoL Measures

Five years after treatment 28% had undergone a hysterectomy because of insufficient improvement of complaints.

QoL improved significantly and remained stable until the 5-year follow-up evaluation, with no differences between the groups.
Is it worth it?
Study Design

- Retrospective audit
- In total 113 patients underwent UAE over the three year period.
- 81 patients were from the Leeds area.
- Minimum of one year post procedure follow-up.
Indication for UAE

- HMB - 43 (53%)
- Dysmenorrhoea - 9 (12%)
- Pressure symptoms-urinary (0%)
- Pressure symptoms- bowel (5%)
- Pressure symptoms- both (5%)
- Chronic Pelvic Pain (12%)
- Not Documented (22%)

Total Procedures - 81
Previous Treatments

- None: 43%
- Non-Hormonal: 3%
- Hormonal: 25%
- Hormonal + Non-Hormonal: 7%
- Not Documented: 3%
Cost Effective?

- Cost of UAE (£4700)
- 1 overnight hospital stay
- Total Abdominal Hysterectomy (£7200)
- Vaginal Hysterectomy (£4000)
Follow-Up

- 68 women (85%) were reviewed by interventional radiology after UAE.

- 61 women (76%) were seen by Gynaecology after UAE.

- 20 (25%) women were seen on a “non-scheduled” basis.
What Happened Next?

33 of the 81 women (41%)
Additional treatments (25),
Pregnant (3),
Reproductive medicine (5).

One woman suffered early menopause
What Happened Next?

• 1 Early Miscarriage

• 1 IUGR - LSCS

• 1 ongoing pregnancy
## Additional Treatments

**Table 1 - Further Treatments**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hysterectomy</td>
<td>12</td>
<td>15%</td>
</tr>
<tr>
<td>Repeat UAE</td>
<td>5</td>
<td>6%</td>
</tr>
<tr>
<td>Mirena</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Esmya</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Hysteroscopic Resection</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Hysteroscopy</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Endometrial Ablation</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Myomectomy</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>25</strong></td>
<td><strong>31%</strong></td>
</tr>
</tbody>
</table>
Where do we go from here?

- Patient selection may be important.
- 20 years ago -> Hysterectomy
- Now? Esyma? Hysterectomy?? UAE???
  Transcervical resection???? Myomectomy??????
Where do we go from here?

<table>
<thead>
<tr>
<th></th>
<th>Subserosal Fibroids</th>
<th>Intramural fibroids</th>
<th>Submucosal fibroids</th>
<th>Mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hysterectomy</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Repeat UAE</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>
Where do we go from here?

- Suggestion that more than one fibroid type is a poor prognostic indicator.

- Hysterectomy more likely in women with >1 fibroid type.

- Not statistically significant - small numbers.
Our Experience

- UAE is safe
- Up to 69 hysterectomies not done
  - Up to £172,000 saving in theatre cost
  - ?Training Impact
Summary

• 81 UAE Procedures
• 100% Technical Success
• 25% non-scheduled follow-up
• 31% required further intervention
• 15% hysterectomy rate
Is it worth it?
Cochrane Database of Systematic Reviews
Uterine artery embolization for symptomatic uterine fibroids
(Review)
Gupta JK, Sinha A, Lumsden MA, Hickey M
Gupta JK, Sinha A, Lumsden MA, Hickey M.
Uterine artery embolization for symptomatic uterine fibroids.
DOI: 10.1002/14651858.CD005073.pub4

Uterine artery embolization vs hysterectomy in the treatment of symptomatic uterine fibroids: 5-year outcome from the randomized EMMY trial.
van der Kooij SM1, Hehenkamp WJ, Voller NJ2, Birnie E, Ankum WM, Reekers JA.

http://www.halinaking.co.uk/Location/Yorkshire/Frames/Places/W%20Yorkshire/WYorkshire.htm
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