Comparison of Peri-operative Outcomes Associated with Robotic Assisted Hysterectomy and Myomectomy

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Abdominal myomectomy vs hysterectomy for large fibroid uterus

- no statistically significant differences
  - estimated blood loss
  - rate of blood transfusion
  - operative time
  - hospital stay

Retrospective cohort study of 394 patients over 3 years; abdominal myomectomy vs hysterectomy

Sawin SW et al, Comparability of perioperative morbidity between abdominal myomectomy and hysterectomy for women with uterine leiomyomas; Am J Obstet Gynecol 2000;183:1448-55
<table>
<thead>
<tr>
<th></th>
<th>Myomectomy</th>
<th>Hysterectomy</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uterine size (wks)</td>
<td>14.4</td>
<td>15.6</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Operative time (min)</td>
<td>200</td>
<td>175</td>
<td>0.00002</td>
</tr>
<tr>
<td>Estimated blood loss (mL)</td>
<td>226</td>
<td>483</td>
<td>0.00001</td>
</tr>
<tr>
<td>Blood transfusion</td>
<td>9.1%</td>
<td>12.8%</td>
<td>0.25</td>
</tr>
<tr>
<td>Hospital stay (days)</td>
<td>3.96</td>
<td>4.42</td>
<td>0.04</td>
</tr>
</tbody>
</table>
- 135 myomectomy and 306 hysterectomy
- No differences
  - Blood transfusion: RR 0.69 (CI 0.44-1.07)
  - Operative time (127 min vs 131 min)
  - Hospital stay (5.44 vs 5.42)
- Myomectomy: decreased blood loss (386ml vs 567mL)

61 women: 40 LM and 21 LH

- Operative time (188 min vs 223 min, p=0.02)
- No differences
  - blood loss (200mL vs 300mL, p=0.36)
  - Transfusion (18% vs 24%, p=0.56)
  - hospital stay (27hr vs 29 hr, p=0.08)
  - Specimen weight (185gm vs 305gm, p=0.11)

Objective

To compare the peri-operative outcomes in patients undergoing robotic assisted hysterectomy (RAH) and robotic assisted myomectomy (RAM) performed by the same surgeon.
Methods

- May 2010 to March 2012
  - 199 RAH patients
  - 100 RAM patients
- Exclusion: <250gm
- Independent sample T-test
- Mann – Whitney U
<table>
<thead>
<tr>
<th></th>
<th>RAH</th>
<th>RAM</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>45±4</td>
<td>36±5</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Parity</td>
<td>2</td>
<td>0</td>
<td>&lt;0.0001</td>
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<tr>
<td>BMI</td>
<td>28±6</td>
<td>25±6</td>
<td>NS</td>
</tr>
<tr>
<td>Prior Surgery</td>
<td>39%</td>
<td>27%</td>
<td>NS</td>
</tr>
<tr>
<td>Specimen weight (gm)</td>
<td>446</td>
<td>454</td>
<td>NS</td>
</tr>
<tr>
<td>Operative time (min)</td>
<td>127</td>
<td>189</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>EBL (mL)</td>
<td>50</td>
<td>100</td>
<td>0.01</td>
</tr>
<tr>
<td>Hospital Stay (days)</td>
<td>0</td>
<td>0</td>
<td>NS</td>
</tr>
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</table>
RAH is associated with shorter operative time and decreased blood loss, especially in patients with large uteri.

Recommend RAH for patients who do not have a preference for uterine-conserving interventions.