What is the evidence for surgical safety of bilateral salpingectomy at the time of laparoscopic hysterectomy?

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Background

- The fallopian tubes as the origin of high serous ovarian cancers - mucinous cystadenomcarcinoma.

- Post-hysterectomy the fallopian tubes can cause
  - hydrosalpinx
  - pelvic pain
  - ectopic pregnancy

- More women are undergoing prophylactic bilateral salpingectomy

- Bilateral salpingectomy does not affect ovarian function.
Objective

To assess whether bilateral salpingectomy (BS) at the time of total laparoscopic hysterectomy (TLH) or laparoscopic subtotal hysterectomy (LASH) influenced:
- surgical time
- blood loss
- length of hospital stay
Method

• Retrospective cohort study

• 306 consecutive single surgeon laparoscopic hysterectomies in a London hospital.

• BS or bilateral salpingo-oophorectomy (BSO) was used selectively.

• Results were analysed and compared using the Student t test and Mann-Whitney test. Significance was a P value of <0.01.
Results

**TLH**
- TLH: 51%
- TLH-BS: 19%
- TLH-BSO: 30%

**LASH**
- LASH: 60%
- LASH-BS: 26%
- LASH-BSO: 14%

N= 112
N= 194
Results

TLH-BS was significantly associated with lower blood loss compared to TLH alone.

Figure 1 Estimated blood loss in patients who underwent a TLH and TLH-BS.
Results

TLH-BS was associated with a significantly shorter surgical time compared to TLH-BSO
### Results

LASH-BS was significantly associated with lower blood loss and shorter length of hospital stay compared to LASH alone or LASH-BSO.

<table>
<thead>
<tr>
<th></th>
<th>LASH alone</th>
<th>LASH-BS</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated blood loss (ml)</td>
<td>Mean: 209, SD: 131, Range: 50-100</td>
<td>Mean: 155, SD: 100, Range: 50-500</td>
<td><strong>0.0043</strong></td>
</tr>
<tr>
<td>Day of discharge</td>
<td>2, 0.6, 1-4</td>
<td>1, 0.5, 1-3</td>
<td><strong>0.0001</strong></td>
</tr>
</tbody>
</table>
Results

Figure 3: 95% CI Day of discharge in patients who had a LASH alone vs. LASH-BS
Current evidence for surgical safety of salpingectomy at time of hysterectomy

Morelli et al., 2013:

• The addition of bilateral salpingectomy to TLH for prevention of ovarian cancer in women who do not carry a BRCA1/2 mutations do not show negative effects on the ovarian function.

• No perioperative complications are related to the salpingectomy step in TLH
Current evidence for surgical safety of salpingectomy at time of hysterectomy

- *McAlpine et al., AJOG 2014*
- 16 min longer hysterectomy operating time (10 min sterilisation)
- No increase in
  - Transfusion
  - Readmission
  - Length of stay (actually 3.5 hr shorter! P=0.01)
Current evidence for surgical safety of salpingectomy at time of hysterectomy

- **Kho and Wechter (2017)**
- Bilateral salpingectomy has been associated with 40% to 65% reduction in future ovarian cancer incidence (odds ratio 0.51; 95% CI, 0.35–0.75%)
- No demonstrable disadvantage in
  - blood loss
  - length of hospital stay
  - hospital readmission
  - surgical complications
Current evidence for surgical safety of salpingectomy at time of hysterectomy

<table>
<thead>
<tr>
<th>Current evidence</th>
<th>Our study</th>
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<tbody>
<tr>
<td>• <strong>NO</strong> increase in transfusion</td>
<td>• Less blood loss during BS</td>
</tr>
<tr>
<td>• <strong>NO</strong> increase in readmission</td>
<td>• <strong>Shorter</strong> length of stay in</td>
</tr>
<tr>
<td>• <strong>NO</strong> increase in length of</td>
<td>LASH-BS</td>
</tr>
<tr>
<td>stay</td>
<td>• Shorter operating time in</td>
</tr>
<tr>
<td>• Lower infectious morbidity</td>
<td>TLH-BS</td>
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</table>
Implication

• no association with short term morbidity or surgical complications

• Women should consider BS at laparoscopic hysterectomy

• Counsel re: ovarian cancer risk reduction and unknown long-term hormonal outcome of BS

FACING HYSTERECTOMY – Should I have my tubes removed too?
References


• RCOG Scientific Paper No. 44 (November 2014) The Distal Fallopian Tube as the Origin of Non-Uterine Pelvic High-Grade Serous Carcinomas.