Barts Health NHS
NHS Trust

# 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

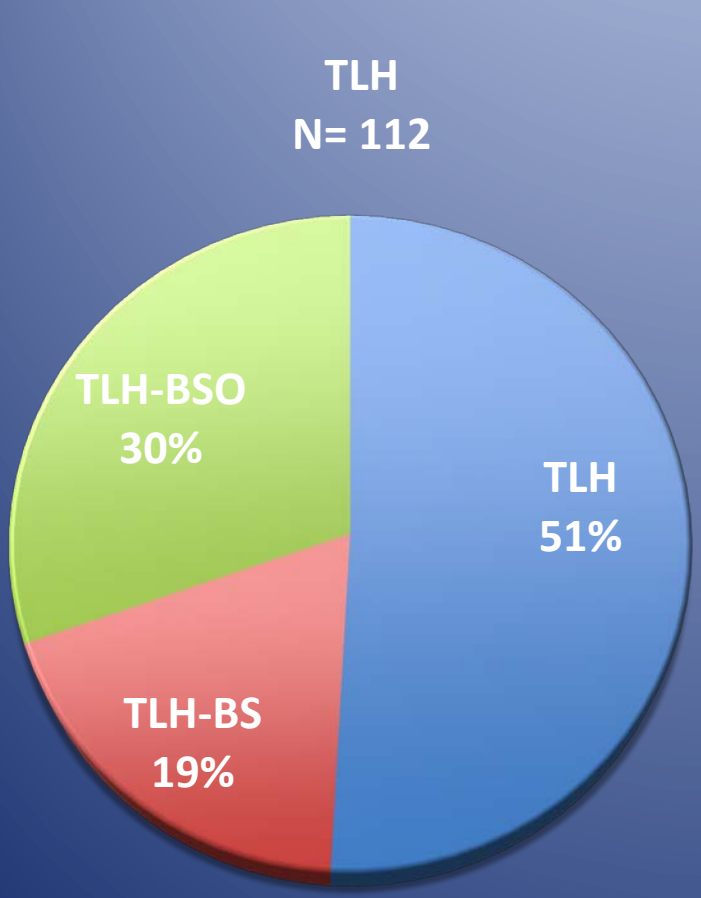
To assess whether bilateral salpingectomy (BS) at the time of total laparoscopic hysterectomy (TLH) or laparoscopic subtotal hysterectomy (LASH) influenced:

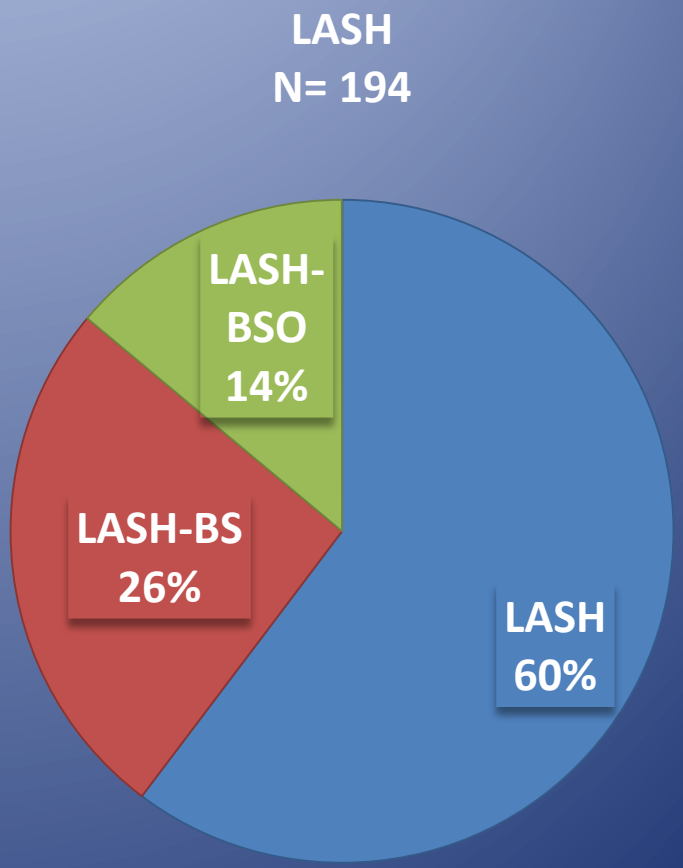
- surgical time
- blood loss
- length of hospital stay

# 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

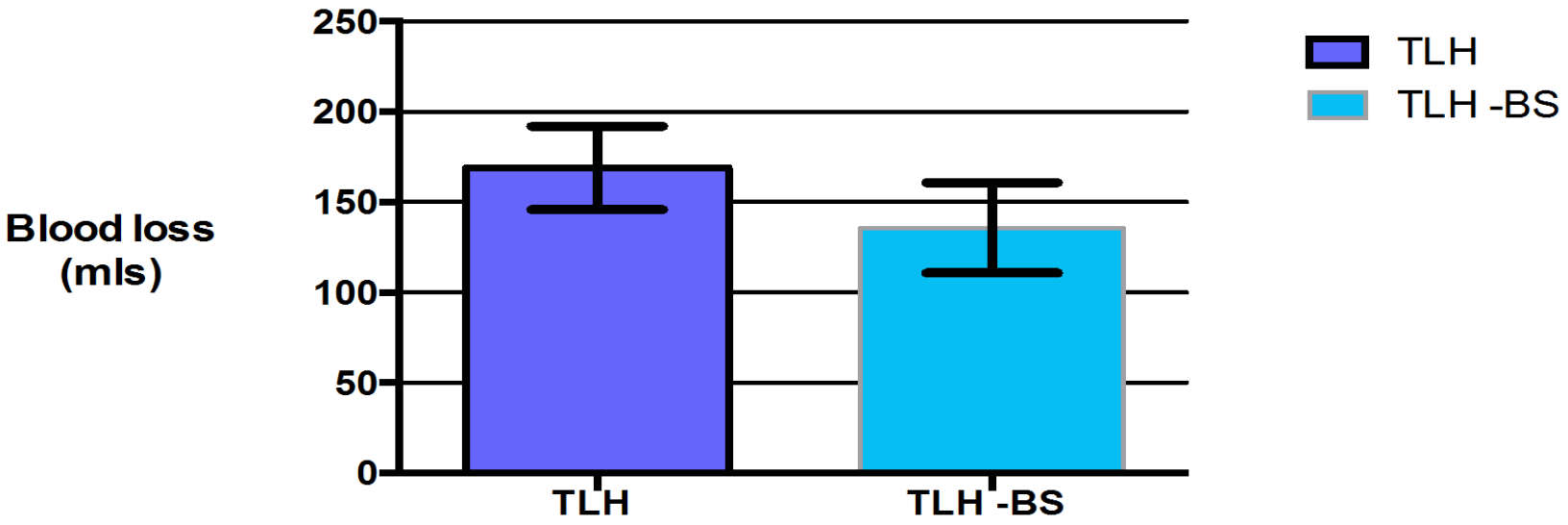

TLH
N= 112
TLH-BSO
30%
TLH
51%
TLH-BS
19%


LASH
N= 194
LASH-
BSO
14%
LASH-BS
26%
LASH
60%

# Results

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

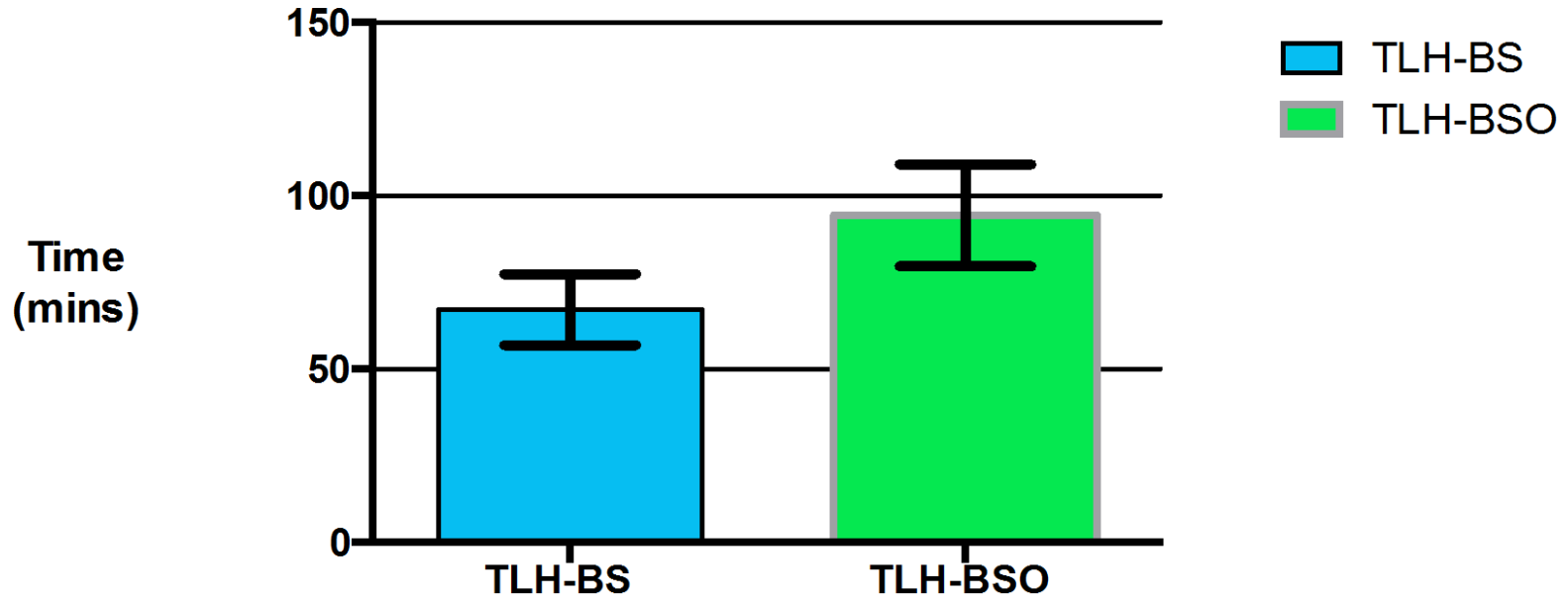
**Figure 1 Estimated blood loss in patients who underwent a TLH and TLH -BS**



# Results

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

**Figure 2: Duration of surgery in patients with TLH-BS vs 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*

| | **LASH alone** | | | **LASH-BS** | | | |
|---|---|---|---|---|---|---|---|
| | Mean | SD | Range | Mean | SD | Range | P value |
| Estimated blood loss (ml) | 209 | 131 | 50-100 | 155 | 100 | 50-500 | **0.0043** |
| Day of discharge | 2 | 0.6 | 1-4 | 1 | 0.5 | 1-3 | **0.0001** |

# Results

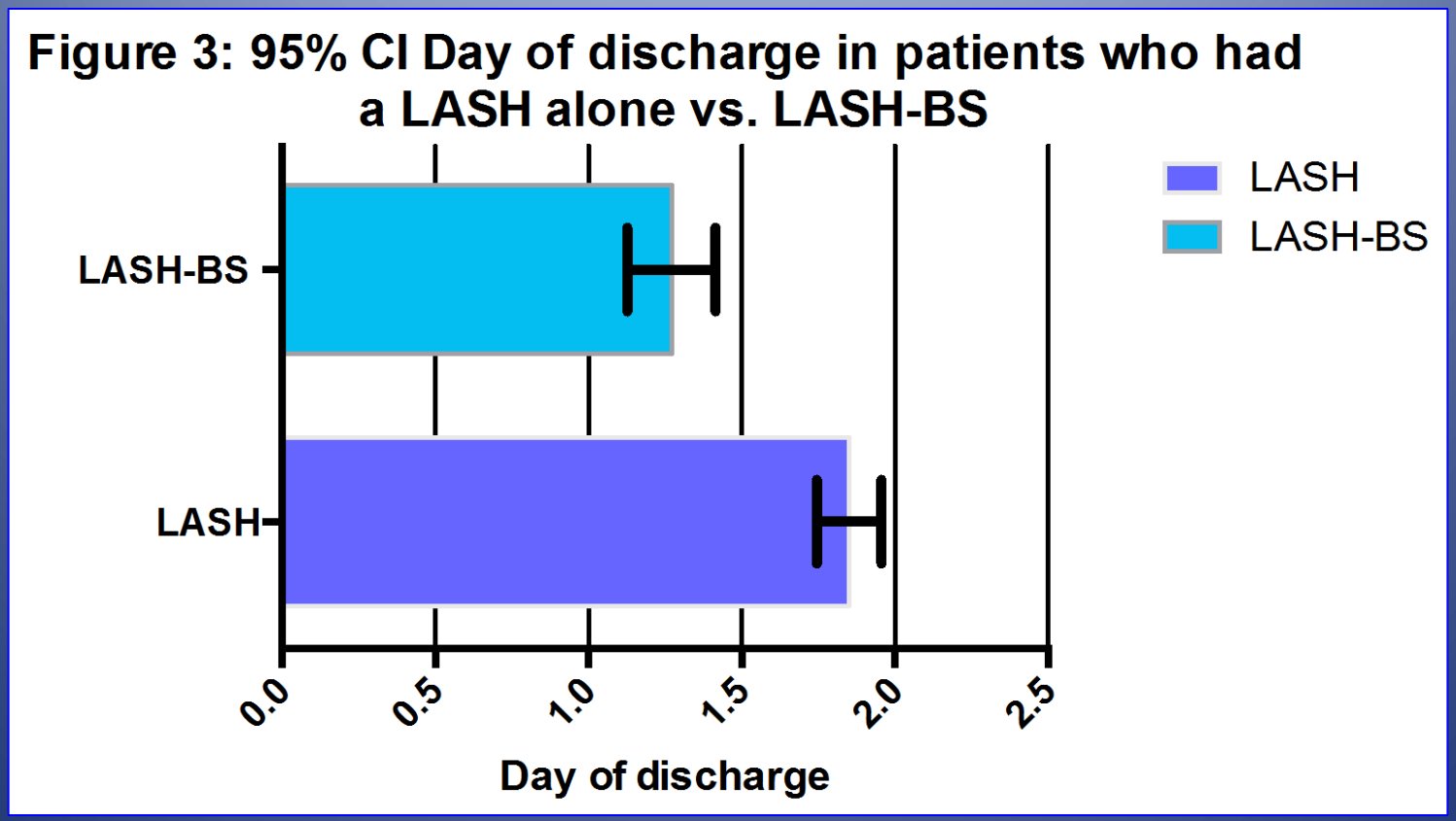


Figure 3: 95% CI Day of discharge in patients who had a LASH alone vs. LASH-BS
LASH
LASH-BS
LASH-BS
LASH
0.0
0.5
1.0
1.5
2.0
2.5
Day of discharge

# 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

**Current evidence**

- **NO** increase in transfusion
- **NO** increase in readmission
- **NO** increase in length of stay
- Lower infectious morbidity

**Our study**

- Less blood loss during BS
- **Shorter** length of stay in LASH-BS
- Shorter operating time in TLH-BS

## Implication

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

- 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

# References


- McAlpine JN, Hanley GE, Woo MMM, et al. Opportunistic salpingectomy: uptake, risks, and complications of a regional initiative for ovarian cancer prevention. Am J Obstet Gynecol 2014;210:471.e1-11.

- Morelli M et al. Prophylactic salpingectomy in premenopausal low-risk women for ovarian cancer: Primum non nocere. Gynecologic Oncology 129 (2013) 448–451

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

- Kho and Wechter (2016) Operative Outcomes of Opportunistic Bilateral Salpingectomy at the Time of Benign Hysterectomy in Low-Risk Premenopausal Women: A Systematic Review. Journal of Minimally Invasive Gynaecology 2017:218-2229.