

# Opportunistic Salpingectomy

## What Is Opportunistic Salpingectomy (OS)?

OS is the removal of the fallopian tubes whenever the opportunity arises during another pelvic or abdominal surgical procedure for the purpose of ovarian cancer risk reduction.

## Why Should Women Consider OS?

Current evidence suggests OS is safe, technically easy to do, adds minimal OR time, and reduces the risk for developing high grade serous ovarian cancer (the most common and lethal form of ovarian cancer) by 80%.

## How Can I Determine if the Patient is Eligible for OS?

**1** Does the patient still have their fallopian tubes?

**2** Does the patient have interest in or plans for a future pregnancy?

Clearly outline that salpingectomy is a sterilization procedure and will prevent any future pregnancy. Anyone who is uncertain about their desire for a future pregnancy is not eligible for OS (or should not be consented for OS – or should not be offered OS).

**3** Determine whether the patient may be at a higher than average risk for ovarian cancer.

- Ask the patient if they have ever been told they have a BRCA or other pathogenic variant that increases their risk for ovarian cancer.
- Ask the patient if they have any family members with ovarian cancer? If so, they may be eligible for genetic screening prior to undergoing OS.<sup>1</sup>
- People with BRCA or other pathogenic variants that increase the risk for ovarian cancer are recommended to see a gynecologic oncologist to discuss alternative risk reduction strategies (e.g. bilateral salpingo-oophorectomy).

# Baseline Data For Complications

## Bleeding

There is no evidence to suggest an increased risk of bleeding when performing OS during another surgical procedure.

- Large population-based studies of OS during gynecologic surgery in Canada and the US observed NO difference in the risk of blood transfusions after hysterectomy alone compared to hysterectomy with OS <sup>2,3</sup>.
- A Cochrane meta-analysis found no difference in the estimated blood loss of hysterectomy alone compared to hysterectomy with OS <sup>4</sup>.

## Ureteric Injury or Ovarian Injury

There is no evidence to suggest an increased risk of ureteric or ovarian injury when performing OS.

- A population-based study in BC, Canada evaluated the rate of abdominal or pelvic organ injury during salpingectomy as a single procure and found < 5 of 7434 (0.07%) patients had an organ injury during the procedure (unpublished data).

## Need for Re-Operation

There is no evidence that OS increases the likelihood of return to OR.

- Data from BC observed < 5 cases of OR return in 7434 patients who had bilateral salpingectomy for sterilization (unpublished data).
- Another study in BC comparing patients who underwent OS during C-section with those who underwent tubal ligation during a C-section showed no difference in the risk of re-operation between the 2 groups <sup>5</sup>.

## Intraoperative Considerations

- A Cochrane meta-analysis showed no difference in conversion from laparoscopic to open surgery between women having hysterectomy alone and hysterectomy with OS.<sup>4</sup>
- During elective laparoscopic cholecystectomy, 32 out of 105 patients had an additional port placed or had an additional surgical instrument used [30.5%] <sup>6</sup>.

## Additional Procedural Time (Range 0 - 16 mins)

- Additional procedural time for OS at the time of hysterectomy is reported in the literature between 0-16 minutes <sup>2,4</sup>.
- During elective laparoscopic cholecystectomy, average additional time for OS was 13 minutes (range 4-45) <sup>6</sup>.
- Unpublished data from BC during colorectal surgery group reports a mean additional OR time of 4 minutes to perform OS.

## Hormone Function

Some women are concerned that removing the fallopian tubes could lead to early menopause if the blood flow to the ovaries is disrupted. This has NOT yet been supported in the literature examining ovarian function following OS.

- Multiple studies examining ovarian sonographic parameters and hormonal assays after salpingectomy have found no increase in risk of ovarian injury <sup>7-11</sup>.
- Evaluation of patients in BC showed no difference in time to initiation of HRT or to first physician visit for menopausal symptoms in women who underwent OS compared to those who did not <sup>12</sup>.
- One Swedish registry study reported more menopausal symptoms among women who underwent hysterectomy with OS 1 year after the surgery compared to those who had hysterectomy alone (relative risk=1.33 [95%CI 1.04-1.69], but age-at-menopause was not reported<sup>13</sup>).

## Final Thoughts

OS is a prophylactic procedure, when performing it please:

- 1. Do not** incur any additional risk to the patient for the procedure. Abort if there are pelvic adhesions or it appears otherwise technically unsafe.
- 2. Do not** alter your surgical approach to the primary procedure in order to remove fallopian tubes.
- 3. Make an effort** to not open additional instruments [i.e. monopolar, clips and Endo-loops can be used in place of bipolar instruments]

## References

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