Acceptability of Salpingectomy with Delayed Oophorectomy as Risk-Reducing Surgery for BRCA Mutation Carriers

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OBJECTIVES: Based upon the adverse effects of surgical menopause and the evidence for the fimbria as the site of origin for serous carcinoma, there is interest in studying salpingectomy without oophorectomy as risk-reducing surgery for women at high risk for ovarian cancer. We aimed to assess the acceptability of a study of salpingectomy among BRCA mutation carriers.

METHODS: We performed a retrospective study of the results of an online survey of salpingectomy as ovarian cancer prevention. This survey was conducted by Facing Our Risk of Cancer Empowered (FORCE) for women with a personal history of breast cancer. Our surveys included questions about the acceptance of prophylactic salpingo-oophorectomy, BRCA mutation status, history of ovarian, fallopian tube, or primary peritoneal carcinoma, and personal cancer history. We performed a post-hoc subgroup analysis on the surveys of nulliparous and parous women.

RESULTS: To date, 204 women completed the survey. Of these, median age was 35 years, 92.5% were white, 25.7% Jewish, and 16.7% had a history of breast cancer. Overall, 34.3% reported definite interest in a study of salpingectomy, 35.3% were unsure, and 30.4% said they would not be interested in the study. Women who reported interest in the study noted the possibility of lowering ovarian cancer risk being the most compelling reason (83.8%). If the women who would not participate in a study of salpingectomy, 46.8% were concerned about surgical complications, 42.2% worried about potential ovarian damage, 32.4% were planning BSO soon, and 32.6% had concerns about surgical costs. Among all women queried, 77.2% found salpingectomy followed by oophorectomy later an acceptable risk, 68% said the potential of undergoing the procedure but not lowering their ovarian cancer risk (p=0.02) acceptable. No history of ovarian, fallopian tube, or primary peritoneal carcinoma (14.7%) was the most compelling reason to participate (83.8%). Of the 48.8% of women who completed a survey, 204 met eligibility criteria and were included in the analysis.

CONCLUSIONS: Many BRCA carriers eligible for risk-reducing surgery indicated interest in participating in a study of salpingectomy alone. Potential study risks were acceptable to most women. These findings suggest that adequate patient accrual for a clinical trial of prophylactic salpingectomy with delayed oophorectomy would be possible.

Acceptability of Salpingectomy with Delayed Oophorectomy as Risk-Reducing Surgery

<table>
<thead>
<tr>
<th>Risks</th>
<th>Found Risk</th>
<th>Acceptable (%)</th>
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<tbody>
<tr>
<td>Risk of losing ovarian function due to disruption of blood supply</td>
<td>66.5 (11)</td>
<td>92.5 (193)</td>
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<tr>
<td>Undergoing salpingectomy followed by delay in 3-5 years</td>
<td>77.2 (132)</td>
<td>93.2 (165)</td>
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<tr>
<td>Risk of undergoing a surgery which may prove to not lower the risk for ovarian cancer</td>
<td>68 (115)</td>
<td>77.2 (132)</td>
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<td>Having blood drawn twice yearly for years that you are at risk</td>
<td>98 (163)</td>
<td>93.2 (165)</td>
</tr>
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For women that reported possible or definite interest in the study, the most compelling reason to participate was the possibility of lowering ovarian cancer risk without menopause (83.8%).

Reasons for Declining to Participate in a Trial of Salpingectomy with Delayed Oophorectomy

- I am concerned about undergoing anesthesia.
- The surgery could lead to complications.
- The surgery could damage the ovaries and put me into menopause.
- I am already planning oophorectomy soon.
- I do not wish to travel for surgery.
- I am concerned about the cost of surgery

Reasons

Agreed

14.7 (30)
46.6 (96)
42.2 (86)
32.4 (67)
11.3 (22)
32.8 (67)

Post-hoc subgroup analyses were performed on the surveys of nulliparous and parous women.

There was no difference between the parous and nulliparous groups in the number of women interested in participating in a trial of salpingectomy with delayed oophorectomy (p=0.42).

Nulliparous women were more likely than parous women to report concerns about potential ovarian damage as a reason to not participate in a salpingectomy trial (52.9% vs 34.2%, p<0.01).

Our findings suggest that adequate patient accrual for a trial of prophylactic salpingectomy with delayed oophorectomy would be possible.

Limitations of this study include the potential for non-response bias and that the accuracy of responses rely solely on the participants as no medical records are available to review.

Selected References