

## Editorial



# Should national societies recommend opportunistic salpingectomy?

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► See the article “Opportunistic bilateral salpingectomy during benign gynecological surgery for ovarian cancer prevention: a survey of Gynecologic Oncology Committee of Japan Society of Obstetrics and Gynecology” in volume 28, e52.



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Ovarian cancer is our biggest challenge in gynecologic oncology today in developed countries. We have no reliable method for early detection or screening, we usually cannot cure it, and until a few years ago we had little idea where it even came from.

This has changed. In 2001 a group of Dutch pathologists and gynecologists examined in detail the tubes and ovaries of women at high risk for ovarian cancer undergoing prophylactic bilateral salpingo-oophorectomy [1]. The Dutch investigators identified what they called dysplasias in the fimbria of the tubes of these specimens [1]. These dysplasias are now called serous tubal intraepithelial carcinomas (STICs) and work by pathologists around the world has substantiated that these STICs are very likely the origin of many serous ovarian and pelvic cancers [2].

If many ovarian cancers originate in the tubes, then women after salpingectomy should have a lower risk of developing this disease. Is this the case? That tubal ligation and hysterectomy are associated with a decreased risk for ovarian cancer has been known for some time. More recently, a nationwide population-based study of more than 5 million women in Sweden identified a hazard ratio of 0.35 (95% confidence interval [CI]=0.17–0.73) in women after bilateral salpingectomy compared with unexposed controls [3]. A nationwide registry-based study in Denmark reported that bilateral salpingectomy reduced epithelial ovarian cancer risk by 42% [4].

The accumulating evidence that salpingectomy is associated with a lower risk for ovarian cancer—and the lack of rapid progress in early detection or treatment—have led a number of national societies to recommend consideration of opportunistic salpingectomy (also called incidental or prophylactic salpingectomy) at the time of benign gynecologic surgery in appropriate women. The Society of Gynecologic Oncologists of Canada, in 2011, led the way, after a program promoting opportunistic salpingectomy was initiated in British Columbia in 2010 [5]. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) issued a Statement in 2012 and the Royal College of Obstetricians and Gynecologists (RCOG) in Great Britain issued a *Scientific Impact Paper* in November 2014. In the United States, the Society of Gynecologic Oncologists put out a Clinical Practice Statement in 2013 and the American College of Obstetricians and Gynecologists (ACOG)

released a Committee Opinion in 2015. Also in 2015 the Austrian Society of Obstetricians and Gynecologists recommended counselling appropriate women for opportunistic salpingectomy in 2015.

Has practice changed? In this issue of *Journal of Gynecologic Oncology*, Mikami et al. [6] report the results of a survey of 767 institutions in Japan, a country where the professional society, the Japan Society of Gynecologic Oncology (JSGO), has not taken a position on opportunistic salpingectomy. The response rate was 58% and 54% of responding institutions reported performing opportunistic salpingectomy. This indicates that the epidemiologic evidence and statements from other countries have changed practice. Surveys in other countries have yielded similar results. The initiative started in 2010 in British Columbia changed practice there [5]. Significant increases in salpingectomy at the time of hysterectomy have been seen in the United States [6-8]. In Italy, 80% of surveyed physicians reported performing prophylactic salpingectomy [9]. In France, the reported rate of salpingectomy at the time of abdominal or laparoscopic hysterectomy exceeded 40% [10]. In Austria, we have found that 70% of gynecology units offered or recommended salpingectomy at the time of benign gynecologic surgery [11].

A concern regarding prophylactic salpingectomy is the possible impairment of ovarian reserve, akin to the association of earlier menopause and hysterectomy. However, a number of recent studies have not indicated that salpingectomy impairs ovarian reserve. A randomized trial showed that even wide excision of the mesosalpinx at the time of salpingectomy did not damage ovarian reserve [12]. Two randomized trials of salpingectomy at the time of laparoscopic hysterectomy showed no negative effects on ovarian reserve [13,14]. Two recent systematic reviews also found no significant effects of salpingectomy on ovarian reserve [15,16].

Association does not prove causality, and we have no prospective data showing that opportunistic salpingectomy reduces the risk for ovarian cancer. In Sweden, a randomized study is currently being set up to look at a range of outcomes of opportunistic salpingectomy. The Hysterectomy and OPPortunistic SALpingectomy (HOPPSA) study will look at short-term complications, intermediate-term effects on ovarian function, and the risk of ovarian cancer over a follow-up of 10–30 years. The long-term objectives will need 4,400 randomized patients, though eligible women can participate even if not willing to be randomized. The HOPPSA study has been registered with ClinicalTrials.gov (NCT 03045965) and should start recruiting soon.

It will take decades until the results of HOPPSA are mature. Until that time national societies and individual physicians and patients will need to make recommendations and decisions without an evidence base of prospective studies. The study by Mikami et al. [6] and statements by societies around the world indicate that many consider the potential benefit of opportunistic salpingectomy in reducing mortality from a most difficult disease greater than the risk.

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