Opportunistic salpingectomy in the Netherlands

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Prevention is a central aspect of gynecologic care. Gynecologists routinely address prevention of cervical cancer, breast cancer, unwanted pregnancy and other issues. Proactive and prophylactic interventions are more common in gynecologic care than in many if not all medical specialties. Prevention is a big part of what we do.

In many countries screening programs have dramatically reduced death rates due to cervical cancer, leaving ovarian cancer as the main cause of gynecologic cancer death. Unfortunately, screening programs have not been shown to reduce mortality due to ovarian cancer. In Austria 3 times as many women now die of ovarian cancer than of cervical cancer. In gynecologic oncology, ovarian cancer is our biggest unsolved problem.

The histologic origins of ovarian cancer were long obscure (another difference to cervical cancer, whose histologic development has been studied intensively for decades). Then, in the mid-1990s, the genetic alterations underlying high rates of ovarian and breast cancer in certain families were identified as mutations of the \textit{BRCA} genes on chromosomes 13 and 17. Soon the technology was developed to test women at high familial risk, and women who tested positive for \textit{BRCA} mutations were offered prophylactic bilateral salpingo-oophorectomy. In the Netherlands, pathologists receiving these specimens from women at high risk studied them intensively and in 2001 Piek et al. [1] described so-called dysplasias in the tubal fimbria. Intensive subsequent studies established these dysplasias — now called serous tubal intraepithelial carcinomas or STICs — as the origin of many if not all serous pelvic cancers [2].

But does it follow that removing tubes reduces the risk of ovarian cancer? Epidemiologic data from Sweden and Denmark suggest that it does. A nationwide population-based study of more than 5 million women in Sweden identified a hazard ratio of 0.35 (95% confidence interval=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]. However, association does not prove causation.
The strong evidence for the tubal origin of serous cancers and the epidemiologic data suggesting risk reduction led professional societies in a number of countries, beginning with Canada [5], to recommend prophylactic bilateral salpingectomy (PBS; also called opportunistic salpingectomy, OS), at the time of gynecologic surgery or cesarean section in appropriate women [6]. These societies concluded that the potential risks outweighed the potential risks of OS (PBS). However, we have no prospective data.

In this issue of Journal of Gynecologic Oncology, Steenbeek et al. [7] explored factors influencing decision making around OS in the Netherlands, a country where there are no official recommendations regarding PBS (OS). A total of 969 surgical gynecologists and trainees were surveyed and about 51% responded. As the authors acknowledge, this modest response rate is a possible source of bias, as colleagues with little interest in PBS (OS) might be less inclined to complete the 44-item survey. The results were “diverse” and reflect a lack of consensus in the Netherlands, but most respondents discussed and performed PBS (OS) at the time of benign hysterectomy. Colleagues were a bit more reserved about PBS (OS) at the time of vaginal hysterectomy. Importantly, cost was not an issue for patients as salpingectomy was covered by insurance.

It is a bit ironic that the Netherlands and Sweden, the countries that have provided the initial impetus and evidence for the concept of PBS (OS) to prevent ovarian cancer, do not have national recommendations for (or against) PBS (OS). In Sweden a randomized study looking at a range of outcomes of opportunistic salpingectomy has been initiated. The Hysterectomy and OPPortunistic Salpingectomy study (trial registry at ClinicalTrials.gov, NCT 03045965) 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 in women undergoing hysterectomy with or without salpingectomy. The long-term objectives will need 4,400 randomized patients, though eligible women can participate even if not willing to be randomized.

Until prospective evidence is available (and this will take decades) physicians in countries with official recommendations can rely on and follow these. In countries without official recommendations physicians should still discuss the issue of OS (PBS) before surgery in appropriate women, offer their best clinical judgement, and make a joint decision.

REFERENCES


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