Should the adnexae be removed during hysterectomy for benign disease to reduce the risk of ovarian cancer?

Individualized management is best, with some patients faring better after salpingo-oophorectomy and others not, according to this study of almost 57,000 women enrolled in Kaiser Permanente Northern California.

The decision-making surrounding gynecologic surgery for benign disease is increasingly complex. Patients and their physicians must balance the potential benefits of salpingo-oophorectomy against possible adverse consequence as they consider various health goals, including longevity, cancer risk, and quality of life.

Chan and colleagues add important data to our understanding of this equation. Analyzing a large cohort of patients from Kaiser Permanente Northern California who underwent hysterectomy for benign disease, they found that removal of the fallopian tubes and ovaries significantly reduced the risk of developing ovarian cancer. The incidence of ovarian cancer per 100,000 person-years was 26.2 for women undergoing hysterectomy alone (95% confidence interval [CI], 15.5–37.0), 17.5 for hysterectomy with unilateral salpingo-oophorectomy (95% CI, 0.39–1.39), and 1.7 for hysterectomy with bilateral salpingo-oophorectomy (95% CI, 0.4–3.0).

The hazard ratio (HR) for ovarian cancer was 0.58 for women undergoing unilateral salpingo-oophorectomy (95% CI, 0.18–1.90) and 0.12 for women undergoing bilateral salpingo-oophorectomy (95% CI, 0.05–0.28), compared with women undergoing hysterectomy alone.

Notable strengths of the analysis include the large size of the study population and the duration of patient follow-up (18 years). The authors acknowledge several limitations of...
the study, including the lack of data on BRCA mutation status and family history of cancer, as well as several other demographic data points possibly relevant to a risk of developing adnexal or peritoneal malignancy.

**Keep these findings in context**

As the authors discuss, this report should be considered in the context of other work suggesting that the lower mortality rate associated with ovarian conservation at the time of hysterectomy for benign disease arises mostly from a protective effect against cardiovascular disease (CVD)—perhaps from subclinical hormone production following menopause. Given that CVD remains the leading cause of death among American women, an individualized assessment of risk is necessary when planning the extent of surgery in this circumstance.

It also is interesting to consider the authors’ finding of a notable but statistically insignificant decrease in the risk of ovarian cancer associated with removal of only one tube and ovary. However, recognizing the possible limitations of their demographic information on this point, they suggest that this may be an area for further investigation, which would necessarily include characterization of the trends in the laterality of adnexal cancers. The preservation of hormonal function makes this an interesting option to consider.

We also need to further investigate the role of bilateral salpingectomy at the time of hysterectomy, with ovarian conservation, as an alternate therapeutic option, based upon evidence that extrauterine serous carcinoma may to a significant degree arise from the tubal epithelium rather than the ovarian cortex.

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**Supplement to OBG Management**

In this issue and online at obgmanagement.com

**Challenges and Opportunities in Managing Osteoporosis Care**

Sol Epstein, MD

An overview of practical issues in the diagnosis and treatment of osteoporosis, including:

- Screening and diagnostic considerations
- Nonpharmacologic interventions for osteoporosis
- Pharmacologic treatment considerations for osteoporosis

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