



Can a novel risk-scoring system for ovarian cancer predict who is most likely to develop disease?

Yes, but the model needs to be validated in other populations and data sets before it can be set to clinical use. For this case-control study of 2,461 women in eastern Massachusetts and New Hampshire, the authors developed a tool to quantify a woman's risk of ovarian cancer; the tool takes into account the number of risk factors she has. Women who have an above-average score according to this model are more likely to develop ovarian cancer.

Women who have a significant family history of breast or ovarian cancer or a documented BRCA mutation should be offered bilateral salpingo-oophorectomy once they have completed childbearing, regardless of the number of other risk factors they have.

Vitonis AF, Titus-Ernstoff L, Cramer DW. Assessing ovarian cancer risk when considering elective oophorectomy at the time of hysterectomy. Obstet Gynecol. 2011;117(5):1042-1050.

► **EXPERT COMMENTARY**

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The risks and benefits of bilateral oophorectomy at the time of hysterectomy for benign disease are the subject of ongoing discussion. (See, for example, an earlier article on the subject, "Remove the ovaries at hysterectomy? Here's the lowdown on risks and benefits," in the February 2010 issue of OBG MANAGEMENT.) There is uniform agreement that women who are at high risk of ovarian and breast cancer because of a significant family history or known BRCA mutation should strongly consider bilateral oophorectomy after completing childbearing. For women at average risk of ovarian or breast cancer, individualization of elective oophorectomy is recommended—but how can you do this for the patient sitting in your office?

Vitonis and colleagues analyzed multiple risk factors associated with ovarian cancer and developed a scoring system to help provide guidance for average-risk women and their physicians who need to make this important decision. This is the kind of mental modeling clinicians do daily in an abstract way, but this scoring system helps frame the associated risks and gives a mathematical value to inform the decision.

Risk factors in the scoring system are:

- Jewish ethnicity
- less than 1 year of oral contraceptive use
- nulliparity
- no breastfeeding
- no tubal ligation
- painful periods or endometriosis
- polycystic ovary syndrome or obesity
- talc use.

Subjects who had none or one of these risk factors were calculated to have a 1.2% lifetime risk of ovarian cancer (98.8% will not get ovarian cancer); the risk was 6.6% with a score of 5 or higher (93.4% will not get ovarian cancer).

Risk equation wasn't fully explored

Noted by the authors, but not studied here, is the other side of this equation: namely, a woman's risk factors for medical conditions that might be exacerbated by oophorectomy—including bone fracture, neurologic conditions, and, most important, cardiovascular



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disease. These conditions appear to be more common after oophorectomy and are considerably more prevalent causes of morbidity and mortality among women than is ovarian cancer.

Case-control design is a weakness


Vitonis and colleagues chose exclusion criteria wisely, but the case-control design of the study is a weakness because of inherent recall and selection biases. The authors should be commended for stating calculated risks as absolute risk rather than relative risk, which is usually misunderstood by the media and patients alike.

As the authors point out, their prototype needs to be validated in other populations and data sets, but it begins to frame the decision regarding oophorectomy for women undergoing hysterectomy for benign disease. However, we won't have the complete picture until the other side of the equation is similarly

WHAT THIS EVIDENCE MEANS FOR PRACTICE

Women who have a significant family history of breast or ovarian cancer or a documented BRCA mutation should be offered salpingo-oophorectomy once they have completed childbearing. Women who have an average risk of ovarian cancer should be counseled about risks and benefits as they apply in their particular case. The study by Vitonis and colleagues may be helpful in this regard. The decision to preserve or remove the ovaries and fallopian tubes should be made according to these risk factors and individual preference.

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analyzed—and that side concerns an individual woman's risks for cardiovascular disease, neurologic conditions, and bone fracture. 

Editorial

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References

1. Sibai BM. 10 practical, evidence-based recommendations for managing severe postpartum hemorrhage. *OBG Manage.* 2011;23(6):44–48.
2. Barbieri RL. Give a uterotonic routinely during the third stage of labor. *OBG Manage.* 2007;19(05):6–13.
3. Jangsten E, Mattsson LA, Lyckestam I, Hellstrom AL, Berg M. A comparison of active management and expectant management of the third stage of labour; a Swedish randomised controlled trial. *BJOG.* 2011;118(3):362–369.
4. Barbieri RL. You should add the Bakri balloon to your treatment for OB bleeds. *OBG Manage.* 2009;21(2):6–10.
5. Dabelea V, Schultze PM, McDuffie RS Jr. Intrauterine balloon tamponade in the management of postpartum hemorrhage. *Am J Perinatol.* 2007;24(6):359–364.
6. Vitthala S, Tsoumpou I, Anjum ZK, Aziz NA. Use of Bakri balloon in post-partum hemorrhage: a series of 15 cases. *Aust NZ J Obstet Gynecol.* 2009;49(2):191–194.
7. Georgiou C. Intraluminal pressure readings during the establishment of a positive “tamponade test” in the management of postpartum hemorrhage. *BJOG.* 2010;117(3):295–303.
8. Barbieri RL. Control of massive hemorrhage: Lessons from Iraq reach the US labor and delivery suite. *OBG Manage.* 2007;19(7):8–16.
9. Skupski DW, Lowenwirt IP, Weinbaum FI, Brodsky D, Danek M, Eglinton GS. Improving hospital systems for the care of women with major obstetric hemorrhage. *Obstet Gynecol.* 2006;107(5):977–983.
10. Driessen M, Bouvier-Colle MH, Dupont C, et al; Pithagore6 Group. Postpartum hemorrhage resulting from uterine atony after vaginal delivery: factors associated with severity. *Obstet Gynecol.* 2011;117(1):21–31.

MORE REVIEWS AND ADVICE ON POSTPARTUM HEMORRHAGE

- >> Read a related case in *Medical Verdicts*, page 58
- >> “10 practical, evidence-based recommendations for the management of severe postpartum hemorrhage” Baha M. Sibai, MD (June 2011)
- >> “Postpartum hemorrhage: 11 critical questions, answered by an expert” Q&A with Haywood L. Brown, MD (January 2011)
- >> “What you can do to optimize blood conservation in ObGyn practice” Eric J. Bieber, MD; Linda Scott, RN; Corinna Muller, DO; Nancy Nuss, RN; and Edie L. Derian, MD (February 2010)
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