Is population-based screening for endometrial cancer feasible?

NOT YET. This nested case-control study of 48,230 postmenopausal women who underwent transvaginal ultrasonography (TVS) as part of the United Kingdom Collaborative Trial of Ovarian Cancer Screening (UKCTOCS) found that TVS screening of asymptomatic women has sensitivity of 77% to 90% and similar levels of specificity, suggesting that population screening may be feasible one day.

In the meantime, the authors conclude: "We do not advocate population screening for endometrial cancer until further data are available."

Jacobs I, Gentry-Maharaj A, Burnell M, et al. Sensitivity of transvaginal ultrasound screening for endometrial cancer in postmenopausal women: a case-control study within the UKCTOCS cohort. Lancet Oncol. 2011;12(1):38–48.

EXPERT COMMENTARY
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Although endometrial cancer is the most common gynecologic malignancy in the United States, population-based screening has not been recommended. In this study—the only large-scale study to focus on the use of TVS in endometrial cancer screening—Jacobs and colleagues correlated endometrial thickness and any endometrial abnormalities detected during screening with a subsequent diagnosis of endometrial neoplasia (cancer or atypical hyperplasia). In an analysis of 96 asymptomatic women who were found to have endometrial neoplasia at the time of TVS, a cutoff for endometrial thickness of 5 mm or more was associated with 77.1% sensitivity and 85.8% specificity.

Among the variables associated with a higher risk of endometrial neoplasia were weight, age, and a personal history of breast cancer. Among those associated with a lower risk of neoplasia were use of oral contraceptives, age at menarche, and parity.

Jacobs and colleagues used these risk factors to divide women into quartiles. Women in the highest quartile had a relative risk (RR) of endometrial neoplasia of 1.98, and 39.5% of cases fell into this quartile. In this quartile, a cutoff for endometrial thickness of 6.75 mm

For more on this topic

›› At what thickness is the endometrial stripe cause for concern in a woman who has postmenopausal bleeding?
Linda R. Duska, MD (Examining the Evidence; October 2010)

›› Update on endometrial cancer
David G. Mutch, MD, and B. J. Rimel, MD (July 2009)

Both articles are available in the archive at obgmanagement.com

FAST TRACK

We need more data from large trials before we can justify population-based screening for endometrial cancer

or more was associated with sensitivity of 84.3% and specificity of 89.9%.

One finding is inexplicable

In an editorial accompanying this study, Vergote and colleagues call attention to what they consider to be an inexplicable finding: The optimal cutoff for endometrial thickness in the highest-risk quartile was greater than it was for the lower-risk women.[1] They also point to the lack of data on subsequent procedures, such as endometrial biopsy and hysteroscopy, in women who had falsely positive TVS findings. And they emphasize their belief that the study should not lead clinicians to perform biopsies in asymptomatic women who are found to have an endometrial thickness greater than 5 mm.

Last, the editorialists, all of whom are gynecologic oncologists, appropriately point out that not all endometrial neoplasia is life-threatening. Therefore, the long-term survival advantage of detecting endometrial neoplasia in asymptomatic women is uncertain.

Reference

1. Vergote I, Amant F, Timmerman D. Should we screen for endometrial cancer? Lancet Oncol. 2011;12(1):4–5.

WHAT THIS EVIDENCE MEANS FOR PRACTICE

The findings of Jacobs and colleagues form the basis for further large-scale study of screening for endometrial cancer in asymptomatic women. But until such studies are conducted and reported (and then only if findings support a benefit from screening), there is no justification for screening asymptomatic postmenopausal women using TVS.

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