# Multimodal strategy improves ovarian cancer detection

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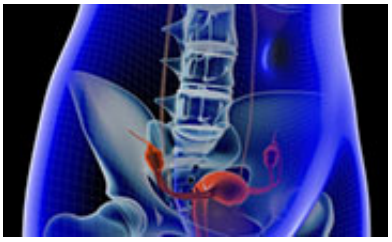

(HealthDay)—Screening with a multimodal strategy (MMS), in which annual serum cancer antigen 125 (CA-125) is interpreted with the risk of ovarian cancer algorithm (ROCA), improves detection of invasive epithelial ovarian or tubal cancers (iEOCs), according to a study published online May 11 in the *Journal of Clinical Oncology*.

Usha Menon, M.D., from University College London, and colleagues conducted incidence screening in 46,237 women, aged 50 years or older, using the MMS strategy. Women were classified according to ROCA and treated accordingly: normal risk, returned to annual screening; intermediate risk, repeat CA-125; and elevated risk, repeat CA-125 screening and transvaginal ultrasound.

The researchers found that 133 of the 640 women who underwent surgery had primary iEOCs. Twenty-two interval iEOCs occurred within

one year of screening, one of which was detected by ROCA and managed conservatively. For detection of iEOCs, the sensitivity and specificity of MMS were 85.8 and 99.8 percent, respectively, with 4.8 surgeries per iEOC. Of the iEOCs, 87.1 percent were detected with ROCA alone. Using fixed cutoffs for CA-125 of >35, >30, and >22 U/mL, 41.3, 48.4, and 66.5 percent would have been detected, respectively. Compared with the single threshold rule, the area under the curve for ROCA was significantly higher (0.915 versus 0.869; P = 0.0027).

"In the context of cancer screening, reliance on predefined single-threshold rules may result in biomarkers of value being discarded," the authors write.

Several authors disclosed financial ties to the pharmaceutical and biotechnology industries.

**More information:** Abstract
Full Text (subscription or payment may be required)