

In the news

STILL HIDDEN BEHIND A SCREEN

Patients with ovarian cancer are typically diagnosed with advanced disease, when therapeutic opportunities are limited. So, it is important to be able to detect early stages of ovarian cancer using tools such as biomarkers or imaging.

However, any screening programme must give sufficient clinical benefit to justify its financial costs and the anxiety or clinical complications arising from the overtreatment of patients with false-positive diagnoses.

The Prostate, Lung, Colorectal and Ovarian Screening Trial (PLCO) reported results of its ovarian cancer study, in which annual screening by the measurement of serum levels of cancer antigen 125 (CA125) and transvaginal ultrasound was compared with standard medical care (*JAMA* **305**, 2295–2303; 2011). Almost 40,000 women in each group were monitored for up to 13 years.

As expected from such a programme, screening increased the number of diagnoses of ovarian cancer (212 versus 176). However, screening neither offered an overall survival benefit, nor resulted in catching the disease at earlier stages of progression. Additionally, 1,080 women underwent surgery based on false-positive screening results, and 15% of these suffered at least one serious complication, providing evidence of screening-related harm.

The results suggest that annual screening in this form is ineffective. “The concern is that the very early precancerous changes may be very difficult to detect with either the ultrasound or the CA125”, said Dr Joseph Lucci (Livescience.com, 6 Jun 2011).

It remains to be seen whether modified screening approaches will be of a greater benefit. “We are testing whether smaller rises in CA125 over time can be a better predictor”, said Dr James Benton (*BBC News*, 5 Jun 2011). Such results reinforce the demand for novel informative biomarkers for early ovarian cancer detection.

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