Screening could prevent one in five ovarian cancer deaths, study shows

Annual blood tests for ovarian cancer would prevent the deaths of nearly 1,000 women each year, a huge study has found

By [Sarah Knapton](https://www.telegraph.co.uk/journalists/sarah-knapton/), Science Editor, **The Telegraph**, 2:17PM GMT 17 Dec 2015

One in five [**ovarian cancer**](https://www.telegraph.co.uk/news/health/news/11941386/IVF-women-third-more-likely-to-develop-ovarian-cancer.html) deaths could be prevented if women were offered a simple blood test each year to screen for the disease, a study has concluded.

Screening has proven controversial in the past because it can throw up false positives, leading women to worry needlessly, or even undergo unnecessary biopsies.

But a [**14 year study**](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)01224-6/abstract) headed by University College London found that nearly 1,000 women could be saved through annual checks, which can [**pick up ovarian cancer**](https://www.telegraph.co.uk/news/health/news/12002450/Blood-test-detects-ovarian-cancer-in-nine-out-of-10-patients.html) early enough to treat. Health experts described the results as ‘important’ and ‘promising.’

“Finally we have data which suggests that screening may prevent ovarian cancer deaths,” said Professor Usha Menon, of UCL Women’s Health department, who co-led the trial.

“This is welcome news and provides fresh impetus for renewed efforts in this area.”

More than 7,000 women are diagnosed with ovarian cancer each year and more than 4,000 will die from the disease, most because it was picked up too late for treatments to be effective.

About 90 in 100 women survive early-stage ovarian cancer for five years or more, compared to just three in 100 with late-stage disease.

To find out if screening could be effective researchers launched the [**UK Collaborative Trial of Ovarian Cancer Screening**](http://scienceblog.cancerresearchuk.org/2015/12/17/ovarian-cancer-screening-trial-a-tantalising-result/) in 2001 and recruited 200,000 women between 50 to 74. A quarter were offered a a blood test which looks for the protein CA125, while another 50,000 were offered an ultrasound check. The remaining 100,000 were kept as a control group.

Over that period far more women died from ovarian cancer in the control group than in the group that was checked each year. The results suggest that spotting the disease early could prevent the deaths of 20 per cent of women who develop the disease. It means that if the tests were rolled out across Britain, nearly 1,000 deaths could be prevented each year.

Study author Professor Ian Jacobs who developed the blood test in 1996, said: "I am delighted that the results suggest that early detection by screening can save lives.

“Longer follow up is needed but this brings hope in the fight against a disease for which the outlook for women is poor and has not improved much during the last three decades."

Prof Christina Fotopoulou, an ovarian cancer surgeon from the Ovarian Cancer Action Research Centre, said “We’ve always been one step behind the disease but a screening method would allow us to catch it at a stage that makes treatment more effective.”

However [**the study**](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)01224-6/abstract) did show that for every three women who had surgery to check for ovarian cancer – based on their blood test results – two did not have any disease. Not only does this lead to needless worry for women, but could place added strain on NHS budgets. And three per cent of women who had surgery needlessly ended up with major complications. Cancer Research UK who helped fund the study said it would amount to ‘a lot of unnecessary surgery.’

The researchers said it would now be up to policymakers to decide whether the benefits were worse than the risk and cost.

Dr Fiona Reddington, Cancer Research UK’s head of population research, said: “This trial has been incredibly useful in improving our understanding of ovarian cancer.

“Detecting it early is vital to make sure that patients have the best treatment options and that more women can survive the disease.

“While this is an important step in ovarian cancer research, we would not recommend a national screening programme at this point.”

The blood test, called ROCA, uses a statistical calculation to interpret changing levels of a blood protein called CA125, which is linked to ovarian cancer.

Athena Lamnisos, CEO of The Eve Appeal said: "These results don't necessarily signal the introduction of a national screening programme, but they are an exciting step forward for early detection of ovarian cancer.

“Medical research takes time to shift from the lab bench to the hospital bedside; today, the UKCTOCS results move early detection one step closer."

Dr Clare Mckenzie, consultant gynaecological oncologist and Vice President for the Royal College of Obstetricians and Gynaecologists (RCOG) said the findings were promising.

“This study is important in that the early detection of ovarian cancer, and hence early treatment, has the potential to save lives.

“However, longer follow up is needed to determine how effective the test is. Women who are worried about ovarian cancer should talk to their doctor who can explain their risk of cancer and available tests.”

Dr Adam Shaw, Clinical Lead for Cancer Genetics, Guy's & St Thomas' NHS Foundation Trust, added “The potential this study shows for earlier detection of ovarian cancer and the number of lives saved is very encouraging.”

The research was published in [**The Lancet**](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)01224-6/abstract).