The only available screening tests for ovarian cancer fail to catch early signs of the disease and often result in unnecessary surgery, said researchers at the UAB Comprehensive Cancer Center.

The new study looked at a screening regimen that combines ultrasound and a blood test for CA-125, a marker for women's cancer.

Results showed the combo screening caught 70 percent of the ovarian cancers in their late stages, when effective treatment options are limited. Knowing this screening limitation means the search has intensified for a better way to detect ovarian cancer, often called the "silent killer," said Edward Partridge, M.D., director of the UAB Comprehensive Cancer Center and the lead study author.

"We still have some comparison data to review, but right now it looks like the positive predictive value of these tests is pretty low," Dr. Partridge said. The study puts the positivity value for both tests at around 1.6 percent per 100 positive screening results, a remarkably low positivity rate that led to many false positives, he said. False positives are erroneous signals of cancer where there is none.

The UAB results are published April 1 in the journal *Obstetrics & Gynecology*.

Searching For Stronger Clues

One alarming trend noted in the study is how often transvaginal ultrasound led to a high rate of unnecessary removal of the ovaries, which means no cancer was detected in these organs post-surgery.

"This data suggests that we need a better screening tool. We need a test that is more sensitive and more specific so we find the cancer earlier and we catch the biological markers that give us stronger clues," Partridge said.

The study was part of the Prostate, Lung, Colorectal and Ovarian Cancer Screening Trial (PLCO trial) and included more than 72,000 women aged 55 to 74.

The PLCO results coincide with a British study published March 10 online in *The Lancet Oncology* that found combo screening for ovarian cancer was extremely successful in finding early stage cancers. But that still doesn't mean the screens led to a reduction in the ovarian cancer death rate, reported the British study authors from the University College London.

Ovarian cancer ranks as the fifth leading cause of female cancer death, and it is diagnosed primarily in women aged 55 and older. Early stages of the cancer cause somewhat vague

symptoms and many malignancies go undetected until other organs and tissues are involved.

The UAB study was a partnership between PLCO investigators at the Huntsman Cancer Institute in Salt Lake City; the University of Colorado Cancer Center in Denver; the Washington University School of Medicine in St. Louis; Georgetown University in Washington, D.C.; University of Pittsburgh Medical Center; the Henry Ford Health System in Detroit; the Pacific Health Research Institute in Honolulu; the University of Minnesota in Minneapolis and the National Cancer Institute in Bethesda, Maryland. Funding was from the National Institutes of Health.

UAB's Comprehensive Cancer Center is a national leader in women's cancer through partnering with its Division of Gynecologic Oncology. The university's Lynn Cohen Clinic offers a team approach to cancer risk assessment, treatment and survival care.

Click here to watch a video of Dr. Partridge discussing this study in further detail.

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