

Ultrasounds may not find this cancer in Black women

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A common algorithm to check for endometrial cancer is not reliable for Black women, according to a new study [published](#) today in *JAMA Oncology*.

In Black patients with concerning symptoms, a tissue biopsy is strongly recommended to rule out endometrial cancer instead of using [transvaginal ultrasound](#), the report concluded.

Endometrial cancer is the most common type of gynecological cancer in the United States. It is one of the few types of cancer now on the rise, especially among Black women, who are more likely to be diagnosed at later stages of the disease. This cancer can cause symptoms such as abnormal vaginal bleeding, pelvic pain, and difficulty urinating, according to the American Cancer Society.

A transvaginal [ultrasound](#) is an [imaging technique](#) that allows the care team to view a woman's pelvic organs in more detail than a pelvic ultrasound allows.

The study looked back at ultrasound data from 1,500 Black women who ended up undergoing hysterectomy at 10 health centers. The study found that having a thinner endometrium measured on transvaginal ultrasound did not mean that there was no [cancer risk](#). In fact, nearly 10% of patients with endometrial cancer had endometrial thickness below a common cut-off point of 4 millimeters.

"This is just not acceptable," said Dr. Kemi Doll, a gynecologic oncologist at the University of Washington School of Medicine and the Fred Hutchinson Cancer Center. Doll is the lead author of the paper. The test is supposed to be 99% to 100% accurate for ruling out endometrial cancer, but that's not the experience of Black women, she noted.

"What we found in real-world clinical scenarios, is that it's just not accurate enough to be safely employed as a strategy among Black people. Whereas, a tissue biopsy is conclusive," she said.

A transvaginal ultrasound is a type of imaging test that uses sound waves

to create pictures of the inside of the pelvis. It involves inserting a probe into the vagina and moving it around to capture images of the uterus, ovaries, [fallopian tubes](#), and other structures.

Transvaginal ultrasound can measure the thickness of the endometrium, which is an indicator of endometrial cancer. A [normal endometrial thickness](#) is usually less than 4 millimeters in [postmenopausal women](#). A thicker endometrium can suggest the presence of abnormal cells or tumors.

If a transvaginal ultrasound shows a thickened endometrium, a biopsy may be performed to confirm the diagnosis of endometrial cancer. But if the thickness of the endometrium is under 4 millimeters, then the [tissue biopsy](#) may not be performed, authors noted, because it may be assumed that the patient is cancer free.

That protocol can be deadly for Black patients.

"We found that 9.5% of the cancers in Black women were detected below the threshold of 4 millimeters, and 11.5% of the cancers would have been missed at 5 millimeters," she said.

The diagnostic triage protocols were established for the general population, Doll explained. But when looking at the outcomes of Black women in particular, she surmised that four complicating factors were at play: decreased visibility of the cancers, increased presence of fibroids within the endometrium, a larger body size and the skill of the technician doing the scans.

"You might have a cancerous lesion in one area, but not another, but if you don't look in that specific area, you might assume (the patient) is cancer free," she said.

When you have a high-risk group, such as Black women, coming to a doctor with symptoms of endometrial cancer, Doll said, "you need to do more." In this case, a tissue sample should be the first test for this cancer, not an optional follow-up test, she said.

This study backs up previous studies which found racial bias in accuracy of ultrasound for endometrial cancer diagnosis. According to a [study](#) published in the *Journal of Clinical Oncology* in 2019, Black women have a higher risk of having a false-negative transvaginal ultrasound than white women. This means that their endometrial thickness is measured as normal, even though they have [endometrial cancer](#).

Another study a year later, led by Doll, [found](#) the algorithm underperforms in Black women for two reasons: fibroids, which are much more common in Black women, can distort the quality of the images; and Black women often have high-risk cancers that may cause less thickening of the endometrium.

The American Cancer Society notes that more nearly 70,000 women—of all ethnicities—will be diagnosed with uterine cancer this year and more than 13,000 will die of the disease.

This newest finding published today involved a retrospective diagnostic study of electronic health record data and secondary administrative data in Black individuals who underwent a hysterectomy in 10 hospitals affiliated with one health system. The analysis was performed in 2023. Other medical centers involved in the study include the University of North Carolina at Chapel Hill, the University of Michigan and Duke University.

More information: Endometrial Thickness as Diagnostic Triage for Endometrial Cancer Among Black Individuals, *JAMA Oncology* (2024). [DOI: 10.1001/jamaoncol.2024.1891](https://doi.org/10.1001/jamaoncol.2024.1891)

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