HPV Test Finds More Precancerous Lesions Than Pap Smears
But there's still no screening test that catches all potential cancers, expert says

By Steven Reinberg
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TUESDAY, June 6 (HealthDay News) -- Compared with conventional Pap smears, testing for the human papillomavirus (HPV) caught more precancerous lesions, European researchers report.

In addition, the newer liquid-based Pap test, which is commonly used in the United States, had marginally improved sensitivity, but produced more false positive results, the researchers found.

Their report appears in the June 7 issue of the Journal of the National Cancer Institute.

"In a large, randomized, controlled trial of women aged 35 to 60 years, HPV testing was more sensitive than traditional cytology in detecting precancerous lesions of the uterine cervix," said lead researcher Dr. Guglielmo Ronco, from CPO Piemonte, in Torino, Italy.

Approximately three lesions were detected by HPV testing for every two detected by traditional cytology, Ronco said. "Adding [liquid] cytology to HPV increased sensitivity only marginally, but increased the false positive rate," he added.

Ronco's team screened 33,364 women for cervical cancer, half with conventional Pap smears and the other half with HPV tests and liquid-based Pap tests. Women with abnormal cells from either Pap test or a positive HPV result were further examined by a technique called colposcopy, where doctors use a magnifying instrument to get a detailed view of the cervix.

HPV accounts for virtually all cases of cervical cancers.

The researchers found that HPV testing combined with liquid-based Pap testing led to
a 47 percent increase in sensitivity, compared with conventional Pap smears, but increased the chance of false positives by 60 percent.

HPV testing alone increased sensitivity by more than 40 percent. Liquid-based Pap tests did not show greater sensitivity than conventional Pap smears but increased the number of false positives.

Given these findings, Ronco recommended that HPV testing, if used as a primary test for cervical screening, should be applied without cytology in all women.

"Cytology should be only in HPV-positive women," Ronco said. "They should be directly referred to colposcopy if cytology is abnormal. If cytology is normal, then they should be retested after one year and referred for colposcopy only if still HPV-positive."

One expert said that although these findings are important, they highlight the inadequacy of the current screening tests for cervical cancer.

"This finding is important, because it upholds the information that we've had to date that the liquid-based Pap smears are better than the old slide-based Pap smears," said Dr. Jennifer Wu, an obstetrician/gynecologist at Lenox Hill Hospital in New York City.

HPV testing and liquid Pap smear has the highest sensitivity, Wu said. But the high degree of false positives means that many women have further unnecessary procedures.

"What is discouraging is that HPV testing and HPV testing with liquid-based cytology both have really high false positive rates," she said. "That means that patients have to undergo colposcopy and possibly undue anxiety. The ideal screening test has yet to be found."

"We need a screening test that captures all of the cervical neoplasms but with very little false positives," Wu said. "And we don't have that yet."

Another expert thinks that HPV testing might be the best initial test for women, although an HPV test alone for screening for cervical cancer is not approved by the U.S. Food and Drug Administration.

The results of this study and others could lead the way for using the HPV test as the first test for women rather than a Pap test, said Debbie Saslow, director of breast and gynecological cancer at the American Cancer Society.

Currently, Saslow recommends that women get a Pap test plus an HPV test. "If women have a choice, they should get a liquid Pap test plus an HPV test," she said.

The current shortfalls in cervical cancer screening might eventually be ameliorated by the expected FDA approval this week of Gardasil, a cervical cancer vaccine that is 100 percent effective against the two most common strains of HPV. On Monday, new research presented in San Diego at the annual meeting of American Society of Clinical Oncology showed that the vaccine also protects against vaginal and vulvar cancers.

More information

The American Cancer Society can tell you more about [cervical cancer](http://www.healthday.com/view.cfm?id=533125).