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***FAST** TRACK*

HPV testing was more sensitive than the conventional Pap test in identifying women with CIN 2,3, and only marginally less specific

Does HPV testing outperform the Pap test as a screen for cervical cancer?

Yes. In this comparison of the two methods among women aged 30 to 69 years, testing for oncogenic strains of human papillomavirus (HPV) using the Hybrid Capture 2 test (Digene) was more sensitive than conventional Papanicolaou (Pap) testing in identifying cervical intraepithelial neoplasia (CIN) grade 2 or 3 (94.6% versus 55.4%) and only marginally less specific (94.1% versus 96.8%). Negative predictive values for each test exceeded 99%.

Combining Pap and HPV testing raised sensitivity to 100% and incrementally increased the percentage of women referred for colposcopy (7.9%), compared with Pap (2.9%) or HPV testing (6.1%) alone.

EXPERT COMMENTARY

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This study from Canada involving more than 10,000 nonpregnant women is likely the first randomized, controlled trial of HPV testing "as a stand-alone screening test for cervical cancer precursors in a North American population with access to quality care," the authors observe. All participants were screened using both Pap and HPV testing, with roughly half of them undergoing the Pap test first and the other half undergoing HPV testing first. Those whose cytologic results were classified as atypical squamous cells or higher underwent colposcopy, as did all women testing positive for oncogenic HPV strains. Colposcopy was also performed in a random sample of women who had negative screening tests.

Although this trial was partially funded by an unrestricted grant from Merck Frosst Canada, the company "had no role in the design of the study, data accrual, data interpretation, or manuscript preparation," the authors note.

Many clinicians already use both tests

Many clinicians in the United States have integrated HPV testing into cervical cancer screening on a "reflex" basis. That is, any woman whose Pap test result is classified as atypical squamous cells has her cytologic sample tested for oncogenic HPV strains. If it is HPV-positive, the woman is triaged to colposcopy.

Switch to routine HPV testing is likely a matter of time

The high sensitivity of HPV testing makes its use as *primary* screening particularly appealing for women who are infrequently screened.

Although sensitivity reached 100% when HPV testing was added to conventional Pap testing, it remains unclear whether both tests should be used routinely in cervical cancer screening. As Mayrand and colleagues point out in this trial, routine use of both tests "only marginally improved sensitivity as compared with HPV testing alone, while doubling the number of tests and increasing referrals."

These important findings may propel clinicians who manage cervical cancer screening programs to make the shift from cytology-based evaluation toward routine HPV testing as the primary screen. ■