

Age-specific evaluation of HPV DNA testing vs. cytology screening

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Human papillomavirus (HPV) DNA testing with cytology triage is more sensitive than conventional cytology screening for detecting cervical lesions, according to a new study published online November 9 in the *Journal of the National Cancer Institute*. Cytology triage in HPV-positive women can improve specificity.

HPV DNA testing has shown higher sensitivity than conventional cytology screening for detecting cervical lesions, but it is uncertain whether the higher sensitivity is dependent on the age of the woman being screened.

Maarit Leinonen, M.D., of the Mass Screening Registry, Finnish Cancer Registry in Helsinki, and colleagues compared the age-specific performance of primary [HPV](#) DNA screening with that of conventional cytology screening. Finnish women aged 25-65 years were sent randomized invitations for HPV DNA testing with cytology triage or conventional screening.

Overall, primary HPV DNA screening with cytology triage was more sensitive than conventional screening for detecting cervical lesions. Among women younger than 35 years, those who got HPV DNA screening were referred for colposcopy more often than those who got conventional screening. Among women aged 35 years or older, HPV DNA testing with cytology triage was more sensitive and more specific than conventional screening, had a higher precision rate, and was associated with fewer colposcopy referrals and follow-up tests.

"In countries like Finland that have a well-organized cervical screening program and low incidence of [cervical cancer](#), new interventions are expected to provide only small increases in a screening program's efficacy," the authors write. "Nevertheless, our results support the use of HPV [DNA testing](#) with cytology triage in primary cervical screening."

In an accompanying editorial, Eduardo L. Franco, MPH, DrPH, said that "this finding underscores the importance of cytology as a triage test in preserving the specificity of the HPV DNA screening approach."

He also suggests that use of an automated and objective molecular test, such as the HPV [DNA](#) assay, as an initial screening step increases the prevalence of abnormal smears destined for cytology reading, thus avoiding the monotony of reading smears in primary screening. In the post-vaccination era, when the prevalence of cervical abnormalities is expected to decrease, this enrichment step may preserve the positive predictive value of the HPV-followed-by Pap approach.

Source: [Journal of the National Cancer Institute](#) ([news](#) : [web](#))

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