"UPDATE ON CERVICAL DISEASE"
J. THOMAS COX, MD (MARCH 2012)

Is a traditional Pap test more informative than liquid-based cytology?

I appreciate Dr. Cox's comprehensive article, but I wonder whether the type of Pap test makes a difference in the findings—specifically, whether it is the "classic" Pap test or liquid-based cytology (LBC).

Another question: When is the right time to perform Pap and human papillomavirus (HPV) co-testing in a 25-year-old patient if the Pap test is negative?

Heshmatollah Azhar, MD
Alpharetta, Ga.

Article confirmed my approach to discordant tests

Because of the high false-negative rate of the Pap test, I had concluded that my own Pap-negative/HPV-positive test results warranted a colposcopy. I'm glad to see that my thinking is in line with the evidence.

Robin L. Stevenson, MD
Tahlequah, Okla.

Planning to add HPV testing to my practice

Thanks for the excellent article. It certainly changed my views on HPV testing. I now plan to incorporate it into my practice.

Patrick Clarke, MD
Jamaica, Fla.

›› Dr. Cox responds

Nuances of cervical screening

I thank Dr. Azhar, Dr. Stevenson, and Dr. Clarke for their comments.

In regard to the traditional Pap test versus LBC, initial studies appeared to demonstrate the superiority of LBC, but a 2008 meta-analysis that used the strictest criteria for study inclusion found no significant differences in sensitivity or specificity, although there was a slight drop in specificity for LBC when atypical squamous cells of undetermined significance (ASC-US) was the threshold for colposcopy.[1] However, LBC does have the advantage of providing residual cells for testing for HPV, Chlamydia, and gonorrhea; in the future, it will also facilitate other marker tests such as p16. Clinicians often prefer having to send only one sample for all tests, rather than several samples.

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Dr. Azhar's question about co-testing is a good one. I can see how the findings of the study by Castle and colleagues might be confusing in regard to when to start co-testing.[2] The US guidelines specifically recommend that co-testing not *be done on women younger than 30 years because of the ubiquity of HPV detection among women in their 20s and the lower risk that HPV infection represents a serious precancer in this population. Although the data from Castle and colleagues involved co-testing of women 25 years and older, there is no reason to initiate co-testing before age 30.*

In regard to Dr. Stevenson's comments regarding colposcopy, the risk level for referral to colposcopy that has been established as providing the best balance between benefit and potential harms is 10%. Data from the ATHENA trial clearly demonstrate that this risk level for referral to colposcopy is attained for women 30 years and older who undergo co-testing and who have a normal Pap test but a positive test for HPV 16 or 18, or both—but it is not attained for those who have a normal Pap test and a positive HPV panel of 12 types other than 16 and 18.[3] The latter group of women benefit most by repeat co-testing in 1 year.

I understand the concern about missing serious disease for 1 year, but this risk is very small, as demonstrated in the article by Kinney and coworkers.[4] Consequently, the guidelines provide the option to first test these women for HPV 16 and 18 to decide who would benefit most from immediate colposcopy and who is at lesser risk (i.e., those who are not positive for HPV 16 and 18) and who would, therefore, be better managed by repeat co-testing in 1 year.

I am glad to hear that Dr. Clarke plans to incorporate HPV testing into his practice. As readers of the Web-exclusive article (at obgmanagement.com*) on new cervical cancer screening guidelines from the US Preventive Services Task Force and the American Cancer Society now know, the guidelines changed dramatically in March of this year. Both organizations recognized the greater long-term reassurance provided by co-testing by recommending that women who test negative on both the Pap test and the HPV test can extend their screening interval to 5 years. Women who test negative on a Pap test alone should be screened again in 3 years.*

References

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"A REASONED PLAN TO MANAGE A PERSISTENT CATEGORY-II FHR TRACING"
DAVID A. MILLER, MD (DECEMBER 2011)

Seeking information on a specific fetal heart monitor

I enjoyed Dr. Miller's article but would like to have known his opinion of the STAN S21 Fetal Heart Monitor. I understand that the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) is involved in a large multicenter trial of the monitor in the United States and have read that the American Congress of Obstetricians and Gynecologists (ACOG) did not endorse its use as of 2006.

Can Dr. Miller offer any clear guidance about the system's clinical utility in 2012?

Albert E. Payne, MD
Toledo, Ohio

›› Dr. Miller responds

Awaiting data on the STAN monitor

I appreciate Dr. Payne's comments and question. As he pointed out, the NICHD Maternal Fetal Medicine Units Network is currently conducting a randomized trial of fetal electrocardiogram ST segment and T wave analysis (STAN) as an adjunct to electronic fetal heart-rate (FHR) monitoring. Transient alterations in fetal myocardial oxygen levels can result in measurable changes in the appearance of the fetal ST segment and T wave. The presence of such changes could serve as an early warning sign of interrupted fetal oxygenation. On the other hand, their absence could provide reassurance in the setting of a confusing FHR tracing.

When the ongoing NICHD trial is completed, it should provide useful information to help guide the clinical application of STAN technology in the United States. Until that time, the most reasonable approach is to rely on the evidence-based principles of FHR interpretation and management outlined by the NICHD, ACOG, and the Association of Women's Health, Obstetric, and Neonatal Nurses.