research updates

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Clinical Guidelines for Primary High-Risk HPV Testing

1. Huh WK, Ault KA, Chelmow D, Davey D, Goulart R, Garcia FAR, et al. Use of Primary High-Risk Human Papillomavirus Testing for Cervical Cancer Screening. Obstet Gynecol. 2015;125(2):330-37.
2. Kinney W, Wright TC, Dinkelspiel HE, DeFrancesco M, Cox JT, Huh W. Increased Cervical Cancer Risk Associated with Screening at Longer Intervals. Obstet Gynecol. 2015;125(2):311-15.

GUIDELINES FOR CERVICAL cancer screening are evolving at a rapid pace, in large part due to the development of high-risk human papillomavirus (hrHPV) testing. Previous iterations of cytology guidelines approved the use of hrHPV testing to assess equivocal cytology results, and as an adjunct to cytology for women aged 30 and older. Now, the FDA has approved primary (or stand-alone) hrHPV testing for women 25 years and older, although it has not offered recommendations for how it should be integrated into screening protocols. Huh et al. is authored by representatives from multiple professional organizations related to cervical pathology, cytopathology, and gynecology, and offers interim clinical guidelines for the integration of primary hrHPV testing, along with a summary of its advantages, disadvantages, and remaining questions.[1] The interim guidelines include the following (excerpted statements are italicized):

1. *A negative hrHPV test provides greater reassurance of low CIN3+ risk than a negative cytology result.* This statement is based on a review of the literature, which found that HPV testing is at least as effective as or more effective than cytology at identifying cancer. Additionally, HPV testing identifies more cancers associated with glandular lesions in the endocervix, which are less likely to be to detected by cytology.

2. *Because of equivalent or superior effectiveness, primary hrHPV screening can be considered as an alternative to current US cytology-based cervical cancer screening methods. Cytology alone and co-testing remain the screening options specifically recommended in major guidelines.*

3. *Based on limited data, triage of hrHPV-positive women using a combination of genotyping for HPV 16 and 18 and reflex cytology for women positive for the 12 other hrHPV genotypes appears to be a reasonable approach to managing hrHPV-positive women.*

4. *Rescreening after a negative primary hrHPV screen should occur no sooner than every three years.* Current recommendations for screening intervals specify that cervical cancer screening should occur every 3 years via cytology, and every 5 years with cotesting.

5. *Primary hrHPV screening should not be initiated before 25 years of age.* Current recommendations for screening state that cytology should begin at age 21, and cotesting at age 30.

These guidelines are not without controversy. The frequency of cervical cancer screening has been a debated topic for many years: while shorter intervals may lead to more cases of cervical cancer identified, they will also lead to more false positives and thus to more unnecessary invasive procedures, like colposcopies and LEEPs, and their associated risks like premature rupture of membranes, preterm labor, and psychosocial harm. The interim recommendation above that suggests starting hrHPV screening earlier than current guidelines may therefore lead to more unnecessary procedures and related harms.

At the same time, extending the cotesting screening interval to 5 years increases the risk for developing invasive cervical cancer and, ultimately, may lead to more deaths from cervical cancer than shorter screening intervals. In an editorial critically examining the guidelines summarized above, a group of gynecologic oncologists argue that using the US Preventative Task Force's model to predict cervical cancer rates in relation to screening intervals shows that a change in cotesting from 3- to 5-year intervals will lead to an additional 1/369 women diagnosed with invasive cervical cancer, and an additional 1/1,639 women dying of cervical cancer. Given that there are 72 million women in the United States aged 30 to 64, this translates into an additional 195,000 cases of invasive cervical cancer, and 44,000 preventable deaths from cervical cancer each year.[2]

It is up to care providers and clients to decide which risks to assume, and to weigh those risks against the harms prevented by either longer or shorter screening intervals. Midwives should stay tuned as these guidelines are likely to change with more evidence, and as the discussion regarding acceptable levels of risk and screening intervals develops. In the meantime, midwives can either integrate the interim clinical guidelines outlined above, or continue to follow the current (2012) cervical cancer screening guidelines, which can be accessed online at the website of the American Society for Colposcopy and Cervical Pathology: http://www.asccp.org/Guidelines/Screening-Guidelines. ◉