STD Tests Are Changing With New Technology

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ATLANTA — Many tests now are available for screening and diagnosing sexually transmitted diseases. However, screening without a clear indication may do more harm than good, Dr. Michael Policar said at a conference on contraceptive technology sponsored by Contemporary Forums.

"We're clearly overscreening women older than age 26 for chlamydia," he explained, as data from the Centers for Disease Control and Prevention suggest that fewer than 2% of sexually active women in this age group are infected with chlamydia.

On the other hand, Dr. Policar recommended routine screening for chlamydia in women through age 25. The prevalence of chlamydia among sexually active teenagers is 5%-10%, and most of these patients are asymptomatic. Annual screening could lead to a 56% reduction in pelvic inflammatory disease in teenagers, according to a study done in Seattle (N. Engl. J. Med. 1996; 334:1362-6).

Clinicians now have multiple choices for screening STDs. Several molecular-based tests are now available for chlamydia and gonorrhea.

Screening for cervical gonorrhea is appropriate in settings where the prevalence is at least 1%, particularly in urban settings. Routine testing in lower-prevalence areas can lead to a low positive predictive value, resulting in a larger proportion of false positives.

Patients who have had a high-risk sexual exposure should be screened for gonorrhea, chlamydia, syphilis, HIV, and, possibly, herpes simplex virus-2, said Dr. Policar, of the University of California, San Francisco.

Clinicians now have multiple choices for screening sexually transmitted diseases. Dr. Policar said that multiple pathogen tests performed with a single sample are preferred when clinicians would like to screen for all the pathogens included in a test. However, he cautioned against using multiple pathogen test panels that "include pathogens that do not need to be found," both to reduce the likelihood of false positives and to avoid using resources for unnecessary tests.

Several molecular-based tests are now available for chlamydia and gonorrhea. The nucleic acid amplification tests (NAATs) can detect a small number of organisms and allow the use of urine rather than endocervical swabs. In fact, the new CDC guidelines suggest using urine unless a speculum already is being inserted for another reason.

Urine sampling for the NAATs has slightly different requirements than do other urine tests, to ensure that any organisms are present in sufficient quantity. Patients cannot have urinated in the past hour, they should not cleanse the perineum before sampling, they should collect the first part of the urinary stream, and they should collect only as much urine as the test requires.

Dr. Policar noted that nucleic acid probe tests are not as accurate as the NAATs, and clinicians using these tests should consider switching to a NAAT system. One caveat of the NAAT is that it cannot be used for a test of cure for at least 3 weeks, because it will detect the presence of dead pathogens. Only a culture test can be performed accurately within that time frame.

According to the 2006 CDC guidelines, a retest for chlamydia or gonorrhea should be performed in 3 months, as these infections are associated with a high likelihood of repeat infection and the retesting strategy focuses on higher-risk patients.

Tests for human papillomavirus (HPV) also are overperformed, said Dr. Policar, especially in regard to the low-risk HPV types for which there is no clinical relevance or treatment strategy. He therefore recommends using the high-risk HPV DNA test only in the context of cervical cancer screening and the management of abnormal Pap smear results, but not as a screening or diagnostic test for sexually transmitted infection.

The combined HPV/Pap test is growing in popularity as a cervical cancer screening tool. It is indicated for women at least 30 years of age who are immunocompetent with their cervix in place. Clinicians using this test should tell women in advance that they will be screened for HPV so they can expect the result. ■