Risk of common vaginal infection linked to preterm birth appears higher for blacks

August 13, 2007 - Risk of a common vaginal infection linked to preterm birth appears to escalate when even one partner is African-American, according to a University of Pittsburgh School of Medicine study presented today at the 34th annual meeting of the Infectious Diseases Society for Obstetrics and Gynecology in Boston.

"When a pregnant woman has bacterial vaginosis, her risk of preterm birth goes up," said Hyagriv Simhan, M.D., M.S.C.R., assistant professor of obstetrics, gynecology and reproductive sciences at the University of Pittsburgh School of Medicine. "And now we can say that gauging risk for bacterial vaginosis is not as simple as just looking at the woman. We also should consider her partner."

Bacterial vaginosis (BV) is a common gynecological infection that affects up to 50 percent of women in some populations. BV is characterized by an increase in vaginal alkalinity and an overgrowth of abnormal bacteria. Among the infection's more prominent symptoms is a milky, foul-smelling discharge.

"For years, clinicians have thought of BV infection as a minor problem, but in addition to increasing the risk for preterm birth, other studies have shown that women who have BV also are more likely to get herpes and other sexually transmitted diseases, including HIV," said Dr. Simhan, a maternal-fetal medicine specialist at the Magee-Womens Hospital of the University of Pittsburgh Medical Center.

For this observational study, Dr. Simhan and his colleagues considered 325 women who were in their first trimester of pregnancy. Among these women, 129 (39.7 percent) were white female/white male partnerships, 35 (10.8 percent) were white female/black male couples, 12 (3.7 percent) were black female/white male couples, and 149 (45.9 percent) were black female/black male partnerships.

"Generally, BV was less common among white women compared to black women in the group. But notably, partner race also showed an influence on BV risk," Dr. Simhan said. "Our results showed that when one partner is black - whether male or female - risk of BV goes up two-fold."

BV infection is commonly treated with a range of antibiotics. However, in some cases treatment fails and infections become resistant. Even women whose infection clears frequently can become re-infected later.

"We found that paternal race is an independent risk factor for BV during pregnancy, and that this is at least as important a risk factor as maternal race," continued Dr.
Simhan. "Studies on the contribution of BV to adverse pregnancy outcomes should consider paternal race as an important factor."

A recent study from the U.S. Centers for Disease Control and Prevention found that preterm birth contributed to more than a third of infant deaths - twice as many as previously thought, making it the leading cause of infant deaths - yet the underlying causes of premature birth are not well understood.

Reasons for the observed variance in BV rates among racial groups also are not well understood, Dr. Simhan said.

"There could be genetic differences that relate to why infection rates are different, and maybe some differences in nutritional status that could play a part. But we don't even know the differences in normal vaginal flora among racial groups," he said. "More study is definitely needed. What we can say now is that it's just not as simple as treating the woman."

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