Cervicovaginal secretions contain HIV-linked immune mediators

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(HealthDay)—Cervicovaginal secretions from pregnant and nonpregnant

women contain HIV infectivity-linked immune mediators, although there is no difference in infectivity between pregnant and nonpregnant women, according to a study published in the December issue of the *American Journal of Obstetrics & Gynecology*.

Brenna L. Hughes, M.D., from the Warren Alpert Medical School of Brown University in Providence, R.I., and colleagues examined the correlation between antimicrobial peptides and chemokines in cervicovaginal secretions and in vitro HIV infectivity among 40 pregnant and 37 nonpregnant women. Cervicovaginal lavage was performed at each study visit, which occurred once per trimester for pregnant women, with an optional postpartum visit, and in the proliferative, ovulatory, and secretory phases of a single cycle for nonpregnant women.

The researchers found that cervicovaginal fluid from pregnant and nonpregnant women decreased HIV infectivity compared with positive controls, with no between-group difference in infectivity. Pregnant women experienced suppression of several cervicovaginal immune mediators during the second and third trimesters (all $P \leq 0.05$). In both groups, across all visits the antimicrobial peptide elafin was significantly correlated with HIV infectivity, except at the postpartum visit in the pregnant group. In nonpregnant women only, secretory leukocyte protease inhibitor correlated significantly with infectivity across all visits.

"If pregnant women are at increased risk for HIV infection, it is unlikely to be mediated by alterations in the effectiveness of these protective secretions," the authors write.

More information: Full Text (subscription or payment may be required)