

Vaginal bleeding in relation to preterm birth

Juan Yang, Ph.D.

California Birth Defect Monitoring Program

Abstract:

This study investigated the relationship between self-reported vaginal bleeding during pregnancy and preterm birth in a prospective cohort of 2,829 pregnant women enrolled from prenatal clinics between 1995 and 2000 in central North Carolina. The overall association between vaginal bleeding and preterm birth was modest (risk ratio (RR)=1.3, 95% confidence interval (CI): 1.1, 1.6). Bleeding in the first trimester only was associated with earlier preterm birth (≤ 34 weeks' gestation) (RR=1.6, 95% CI: 1.1, 2.4) and preterm birth due to PPROM (RR=1.9, 95% CI: 1.1, 3.3). Bleeding in both trimesters was associated with preterm birth due to preterm labor (RR=3.6, 95% CI: 1.9, 6.8). Bleeding of multiple episodes, multiple days, and with more total blood loss was associated with an approximate two-fold increased risk of earlier preterm birth, PPROM, and preterm labor. In contrast, bleeding in the second trimester only, single episode, single day, and less total blood loss was not associated with any category of preterm birth. Vaginal bleeding was not associated with preterm birth among African-Americans (RR=1.2, 95% CI: 0.9, 1.7). This study indicates that more intense but not less intense bleeding is associated with earlier preterm birth and spontaneous preterm birth presenting as PPROM or preterm labor, and suggests bleeding is less predictive of preterm birth among African-Americans compared to White women.

