Infection with HIV as a risk factor for adverse obstetrical outcome.

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Abstract:

We carried out a case-control study to investigate the role of sexually transmitted diseases (STDs), including infection with HIV, as risk factors for adverse outcome of pregnancy. Overall, 1507 women were enrolled within 24 h of delivery. Cases (n = 796) were mothers of low-birthweight infants (less than 2500 g) or of stillborns. Low-birthweight infants were divided into preterms (n = 373) and neonates small for gestational age (n = 234). Stillborns were separated into intrauterine fetal deaths (n = 120), and intrapartum fetal deaths (n = 69). Controls were selected from mothers delivering a live baby of greater than or equal to 2500 g (n = 711). The maternal HIV seroprevalence in the control group was 3.1%. Prematurity was associated with maternal HIV antibody [8.6% seropositive; adjusted odds ratio (OR) 2.1; 95% confidence interval (CI) 1.1-4.0], as was being born small for gestational age (7.7% seropositive; adjusted OR 2.3; 95% CI 1.2-4.2). In mothers who delivered a stillborn baby, both intrauterine fetal death (11.7% seropositive; adjusted OR 2.7; 95% CI 1.3-5.5) and intrapartum fetal death (11.6% seropositive; adjusted OR 2.9; 95% CI 1.3-6.5) were independently associated with HIV seropositivity in the mother. Maternal syphilis was confirmed as an important risk factor for intrauterine fetal death (14.3% positive; adjusted OR 4.8; 95% CI 2.4-9.5). No significant association was found between other STDs, including gonococcal and chlamydial infection, and adverse obstetrical outcome. These results suggest an association between maternal HIV infection and adverse obstetrical outcome, defined as low birthweight and stillbirth.