

Abstract

OBJECTIVE:

To assess adverse pregnancy outcome associated with maternal syphilis and congenital syphilis rate based on FTA-ABS-19s-IgM.

DESIGN:

Descriptive cross-sectional study.

SETTING:

Pumwani Maternity Hospital (PMH), the largest maternity unit in Nairobi, Kenya.

SUBJECTS:

Rapid Plasma Reagin reactive women and their live born infants.

MAIN OUTCOME MEASURES:

Syphilis serology in pregnant women, FTA-ABS-19s-IgM in cord blood and pregnancy outcome.

RESULTS:

Three hundred and seventy seven out of 12,414 women (3%) were RPR+. 4.0% of RPR+ and 1.4% of RPR- women delivered a stillbirth (OR 3.0, $p<0.001$). 19% of RPR+ and 10% of RPR- had low birth weight deliveries (OR 2.1, $p<0.001$). Mothers untreated for syphilis during pregnancy had significantly more preterm births (18.5% vs 9.2%, OR 2.3, $p=0.026$), and more stillbirths (5.4% vs 1.0%, OR 6.3, $p=0.044$). Of the 200 randomly selected cord bloods of RPR+ women, 142 (72%) were TPHA+. Nine (6.3%) of the 142 TPHA+ cords were FTA-ABS-19s-IgM+.

CONCLUSIONS:

Stillbirth and low birth weight rates were high in RPR+ untreated pregnant women and treatment significantly improved pregnancy outcome. Based on very stringent laboratory criteria (FTA-ABS-19s-IgM), 6.3% of live born infants with TPHA+ cord blood were considered syphilis infected.