Abstract:

Abstract Among 302 female sex workers in Nairobi, Kenya, who were followed for 17.6 +/- 11.1 months, 146 had one or more infections with Chlamydia trachomatis; 102 had uncomplicated cervical infection only, 23 had C. trachomatis pelvic inflammatory disease (PID), and 21 had combined C. trachomatis and Neisseria gonorrhoeae PID. As determined by multivariate logistic regression analysis, risk factors for C. trachomatis PID included repeated C. trachomatis infection (odds ratio [OR], 1.8; 95% confidence interval [CI], 1.3-2.4; P = .0004), antibody to C. trachomatis heat-shock protein 60 (OR, 3.9; CI, 1.04-14.5; P = .04), oral contraceptive use (OR, 0.28; 95% CI, 0.08-0.99; P = .048), and number of episodes of nongonococcal nonchlamydial PID (OR, 1.7; 95% CI, 1.1-2.7; P = .02). Among human immunodeficiency virus (HIV)-seropositive women, a CD4 lymphocyte count of <400/mm3 was an additional independent risk factor for C. trachomatis PID (OR, 21.7; 95% CI, 1.2-383; P = .036); among HLA-typed women, HLA-A31 was independently associated with C. trachomatis PID (OR, 5.6; 95% CI, 1.1-29.4; P = .043). The results suggest an immune-mediated pathogenesis for C. trachomatis PID.