ophilus ducreyi among trucking company workers in Kenya.

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Abstract:

BACKGROUND AND OBJECTIVES: To determine the prevalence, correlates, and incidence of Haemophilus ducreyi antibodies, a cohort of East African trucking company employees was evaluated. STUDY DESIGN: Human immunodeficiency virus (HIV)-1-seronegative men working in six trucking companies in Mombasa, Kenya, were evaluated with a questionnaire and serologic testing for antibodies to H. ducreyi and other sexually transmitted pathogens. Men who were initially H. ducreyi seronegative were retested at 1 year of follow-up. RESULTS: The H. ducreyi seroprevalence among 501 men at enrollment was 26.5%. Seropositivity was significantly associated with older age, married status, years of active sex life, number of sex partners in the past year, history of unprotected sex with a prostitute in the past year, and history of alcohol intake (all P values < 0.01). Occupational travel for more than 14 days per month was also significantly associated with H. ducreyi seropositivity (odds ratio [OR] 2.1, 95% confidence interval [CI] 1.3-3.2). Using multivariate analysis, H. ducreyi seropositivity was independently associated with age, married status, history of sex with a prostitute, and history of alcohol intake. Presence of H. ducreyi antibodies was significantly associated with seropositivity to the other major genital ulcerative pathogens, Treponema pallidum (OR 4.3, 95% CI 2.2-8.3), herpes simplex virus type 2 (OR 4.9, 95% CI 2.0-11.5), and Chlamydia trachomatis (OR 3.2, 95% CI 1.5-6.9). These associations remained significant after adjusting for demographic and exposure variables. The incidence of seroconversion to H. ducreyi antibodies was 3.6 per 100 person years. CONCLUSIONS: Serologic evidence of H. ducreyi infection was common among male trucking company employees. H. ducreyi seropositivity is an objective marker of high-risk behavior and is associated with serologic evidence of other ulcerative sexually transmitted diseases. PIP: A prospective cohort study of 501 human immunodeficiency virus (HIV)-negative male trucking company employees from Kenya revealed high rates of infection with Haemophilus ducreyi, the causative agent of chancroid. At enrollment in March 1993, the seroprevalence of H ducreyi antibodies was 26.5%. Also detected were high rates of herpes simplex virus-2 (49%), Chlamydia trachomatis (41%), and syphilis (8%). Of the 368 men who were seronegative at enrollment, 241 were re-evaluated after 12 months of follow-up. There were 9 seroconversions (3.6/100 person years). Sexual contact with a prostitute in the preceding year was reported by 33% of truckers and only a third of these encounters involved condom use. Ever-use of condoms was reported by only 51%. H ducreyi seropositivity was significantly and positively associated with older age, occupational travel for more than 2 weeks per month, history of sex with a prostitute, high number of sex partners in the past year, unprotected sex with a prostitute in the past year, alcohol drinking, and infection with other sexually transmitted diseases. The significant association of H ducreyi and seropositivity to syphilis, herpes simplex virus-2, and C trachomatis (odds ratios: 4.3, 4.9, and 3.2, respectively) raises the possibility that a genital ulcer increases the likelihood of infection with a second ulcerative pathogen. Overall,

alence of H ducreyi may be used as an indicator of the in a population, as well as an objective end point for measuring the efficacy of behavioral interventions in communities where the HIV seroincidence is too low to serve this purpose.