

Common parasitic infection leads to increased risk for HIV infection

January 25 2007

A new study shows a significantly increased risk of HIV infection among women with a common sexually transmitted disease, trichomoniasis. Although studies have been undertaken in the past to show the link between sexually transmitted infections and susceptibility to HIV, the study published in the March 1 issue of *The Journal of Infectious Diseases*, now available online, is one of the first to demonstrate a statistically significant association between trichomoniasis and HIV infection.

Trichomoniasis, caused by the parasite, *Trichomonas vaginalis* infects more than 170 million people worldwide each year. On its own, it usually does not cause serious complications. Some men may experience a mild burning sensation or discharge. Some women may have a frothy, strong-smelling yellow green discharge, and may feel discomfort during intercourse and urination, as well as itching of the genital area. Lower abdominal pain occurs in rare cases.

The study, conducted by R. Scott McClelland, MD, MPH, and colleagues at the University of Washington in Seattle, the University of Nairobi, and the Coast Provincial General Hospital in Kenya, followed 1,335 HIV-seronegative women over the span of 11 years. Because infection with *T. vaginalis* is common, even a modest increase in vulnerability to HIV acquisition as a result could mean a substantial attributable risk for HIV infection overall. According to McClelland, "the modest increase in risk makes it important that studies are either very large or of long duration in order to demonstrate such an effect."

Their results showed a 1.5-fold increased risk of HIV infection among women with trichomoniasis. "What this means is that a woman with trichomoniasis is at about fifty percent greater risk for acquiring HIV than a woman without trichomoniasis, after adjusting for other differences between the women such as differences in the rates of condom use, number of sex partners, etc." said McClelland.

The study pointed to several reasons why vaginal trichomoniasis could possibly lead to an increased risk of HIV acquisition. Trichomoniasis can cause tiny areas of bleeding within mucous membranes that could provide a physical pathway for HIV infection. Also, the study noted, the *T. vaginalis* parasite has been shown to break down an enzyme that blocks HIV attachment to cells.

The findings from this study provide support for prevention and treatment of sexually transmitted diseases such as trichomoniasis as important strategies for preventing HIV infection. As a next step, McClelland suggested that "comprehensive strategies for reducing vaginal infections and addressing potentially harmful intravaginal practices such as douching, washing, or placing traditional substances in the vagina should be developed and evaluated in clinical trials as possible female-controlled HIV prevention interventions."

Source: Infectious Diseases Society of America

Citation: Common parasitic infection leads to increased risk for HIV infection (2007, January 25) retrieved 27 April 2024 from <https://medicalxpress.com/news/2007-01-common-parasitic-infection-hiv.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.