Is AIDS a Predisposing Factor to Urinary Tract Infection?

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Table 1. Epidemiological characteristics of AIDS patients with UTI

Dear Sir,

Several studies have shown the prevalence and the incidence of urinary tract infection (UTI) among HIV-infected patients [1-4], and some of them have demonstrated that the risk of bacteriuria and UTI may be increased in HIV-infected patients [2-4] mainly when CD4+ lymphocyte counts are below 200 cells/mm³ [5].

We studied 409 AIDS patients over a mean period of 8.1 ± 3.4 months, with the diagnosis of AIDS according to CDC criteria, 285 men and 124 women, aged from 20 to 40 years. Risk groups were: 216 homosexuals, 88 women with heterosexual contacts, 55 intravenous drug addicts (39 men and 16 women), 18 hemophiliacs and 32 blood transfusions (20 women and 12 men). By means of a clean catch midstream urine samples were obtained for urinalysis and urine cultures were carried out when we had a positive nitrite test, pyuria or bacteriuria in the urinalysis or when one of the urinary symptoms (dysuria, urgency, frequency or burning pain) or fever were present; UTI was considered present when more than 10,000 colony-forming units/ml were found in urine cultures. Patients using antibiotic therapy, those who reported any risk factor for HIV-infection or who had any other known predisposing factor to UTI were excluded from this study.

We found UTI in 8 (1.9%) patients: 6 homosexuals (where the causative microorganism was *Escherichia coli* in all of them), 1 intravenous drug-addicted women (caused by *Staphylococcus saprophyticus*) and 1 women with heterosexual contact (caused by *Escherichia coli*), who presented a previous history of recurrent UTI with 1-3 episodes/ year (table 1). All of them had a good response to appropriate administration of antibiotic therapy.

The results suggest that UTI are uncommon in AIDS patient, although in the group of homosexuals the prevalence of UTI was higher than in the other groups of AIDS patients, as was shown in other studies [1-4]. The possible role of male homosexuality as a predisposing factor to UTI is controversial. However, the association of immunosuppression observed in AIDS patients and urethral colonization with uropathogenic fecal microorganisms acquired by rectal insertive intercourse in homosexual men may act as a predisposing factor to UTI in AIDS patients. However, UTI should be investigated in all AIDS patients with fever of unknown origin.

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