



INCIDENT HIV INFECTION AMONG PATIENTS ATTENDING STI CLINIC IN AJMER, RAJASTHAN.

Dermatology

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ABSTRACT

Introduction: Sexual contact is the most common mode of HIV transmission in India. Sexually transmitted infections (STIs) commonly co-exist in HIV patients due to common mode of transmission and may help in early diagnosis of HIV.

Aim: To study the incidence of HIV among patients attending STI clinic of Dermatology OPD of JLN hospital, Ajmer, Rajasthan.

Material and Methods: All STI patients were counselled to undergo HIV testing. HIV diagnosis was made by SD Bioline, Comb AIDS and Tridot tests. Analysis was made regarding incidence of HIV and type of STI in HIV positive patients.

Results: Out of the 3875 STI patients tested for HIV, 62 (1.6%) patients turned out to be positive. It was observed that most common STI in HIV patients at the time of diagnosis was herpes genitalis followed by candidal balanoposthitis, candidal vulvovaginitis and trichomoniasis.

Conclusion: STI patients are considered "at-risk group" for HIV. STIs increase chances of HIV transmission and acquisition manifold. All STI patients should be counselled to undergo HIV testing for early diagnosis of HIV. Early detection of these cases will help contain spread of HIV in the community by reducing transmission.

KEYWORDS

HIV, STI, Herpes and HIV.

Introduction

Human immunodeficiency virus (HIV) infected individuals may remain asymptomatic and many times unaware of the disease. A study suggests, approximately 20% of the estimated 1.2 million persons living with HIV infection in the United States were not aware of their infection.¹ Sexual route of transmission is most common for HIV, a study performed in Vellore, India estimated sexual transmission to be responsible for 85% cases of HIV.² It can also be transmitted by all body fluids except saliva, sweat, tears, urine and faeces. STIs commonly co-exist with HIV and increase both the transmission and acquisition of HIV. Break in mucosal integrity in ulcerative STIs and increased number of target cells having CD4 receptor in the mucosa in ulcerative and non-ulcerative STIs are probably responsible for increased HIV transmission and acquisition. Thus, STIs act as portal of entry as well as exit for HIV. Prevention, detection and treatment of STIs is essential for controlling spread of HIV.³ The present study was done to know the incidence of HIV among STI patients and to understand the role of STIs and Integrated counselling and testing centres (ICTC) in early detection and transmission of HIV infection.

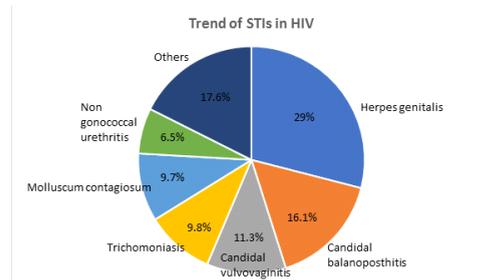
Materials and Methods:

All patients attending STI clinic of department of Dermatology, Venereology and Leprosy of JLN Medical College and Hospital, Ajmer, Rajasthan between June, 2015 and May, 2018 were screened for presence of STIs. STI diagnosis was made clinically along with relevant laboratory investigations including staining, microscopy, culture and serology. Patients presenting with non-sexually transmitted genital diseases and patients who were known to be HIV (+) were excluded. Remaining STI patients were counselled to undergo HIV testing. HIV diagnosis was made by "SD Bioline, Comb AIDS and Tridot tests". Demographic data was collected from all patients included in the study. Analysis of data was made to find out incidence of HIV in STI patients and to know the type of STI associated with HIV diagnosis.

Results:

Total number of patients who attended STI clinic during the study period were 4311, out of these 152 patients were diagnosed with non-sexually transmitted genital diseases and 98 patients were found to be known cases of HIV/AIDS. Out of the remaining 4061 STI patients, 3875 consented for HIV testing and 62 (1.6%) of them tested positive for HIV. All HIV (+) patients were in the age group of 15-55 years. Most of the patients (74%) were in the young age group of 20-40 years. 72.6% HIV (+) patients were male and rest were females.

It was observed that overall most common STI in HIV patients at the time of diagnosis was herpes genitalis (29%) followed by candidal balanoposthitis (16.1%), candidal vulvovaginitis (11.3%) and trichomoniasis (9.8%). Other STIs in descending order were molluscum contagiosum (9.7%), non gonococcal urethritis (6.5%), and others (17.5%).



Graph 1: Trend of STIs and HIV co-infection

Description	Male	Female	Total
Total no. of STI patients tested over 3 years	2713 (70%)	1162 (30%)	3875 (100%)
No. of patients newly diagnosed with HIV	45 (72.6%)	17 (27.4%)	62 (100%)
Incidence of HIV among STI patients	1.66%	1.46%	1.6%

Table 1: Incidence of HIV among STI patients

Discussion:

The incidence of HIV among STI clinic patients was 1.6% in our study which was lower than other studies like Thappa et al⁴ and Selvakumar et al⁵ which may be because we calculated incidence of HIV by including only newly diagnosed HIV cases, other studies have looked at the prevalence (both known cases and newly diagnosed cases) of HIV in STI patients. The difference in incidence from previous studies might also be contributed by overall declining trend of HIV in India. Patients attending STI clinic are shown to be at a higher risk of being

diagnosed with HIV than general population. A study conducted in Georgia, USA showed that 27.3% of all newly identified HIV-positive persons were identified in STI clinics.⁶ 3% of newly detected HIV cases came from STI clinic attendees.⁷

HIV positivity was seen more in male STI patients which is similar to a study done by Vibhu et al.⁸ It is evident that viral and fungal infections comprised approx. 80% of STIs in our patients. This is similar to the findings of study conducted by Setia et al⁹ which states that Bacterial STIs represented the single largest group of infections in 1994 while viral infections formed the largest group in 2006.

Conclusion:

STI patients continue to be considered “at-risk group” for HIV by National AIDS Control Organisation.¹⁰ All STI patients should be counselled and tested for HIV, ICTCs and STI clinics play a central role in detection, counselling and care of STI and HIV patients.⁷

STI clinics reach persons who may not otherwise seek HIV testing. Testing detects asymptomatic HIV patients at an early stage and breaks the chain of transmission. Prevention, early detection, complete treatment and counselling of STI patients will go a long way in reducing incidence of HIV. Failure to implement counselling and testing for HIV in STI patients is a missed opportunity for patients to benefit from early diagnosis and treatment for HIV infection. It is therefore imperative to control STIs and treat them at the earliest to reduce the risk of HIV transmission.

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