

Syphilis in HIV among STI clinic attendees in a tertiary care Institution-One year retrospective study

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Abstract: Syphilis is a great old venereal disease with broad range of manifestations and variable course which may be altered in HIV positive patients that will make the diagnosis more difficult. Syphilis and other STI's that produce genital lesions or evoke an inflammatory response are important risk factors for the acquisition and transmission of HIV. The present retrospective study includes a total of 506 new male and female patients who attended STI clinic at Govt. General Hospital, Vijayawada from January to December 2014 for a period of one year. Patients were diagnosed on the basis of history, clinical examination, Serum RPR test confirmed by TPHA. CSF –RPR and TPHA were done in all syphilis patients. Diagnosed cases were screened for HIV test and CD4 count was done subsequently. Serum TPHA was positive in all 12 patients and RPR in 11 patients. CSF RPR and TPHA was positive in 8 patients, indicating asymptomatic neurosyphilis. 11 out of 12 had concurrent HIV infection with CD4 counts ranging from 190-500.

Key words: Syphilis with HIV, CSF RPR & TPHA, Asymptomatic neurosyphilis in HIV.

I. Introduction:

Incidence of sexually transmitted infection shows regional variations, though a rising trend of prevalence of viral STI's has been observed, syphilis still continue to remain a commonly diagnosed STI. Secondary syphilis may be more aggressive in HIV positive patients and there is an increased rate of early neurological involvement, hence regular follow up is required..

Aim:

One year retrospective study of the acquired syphilis in HIV patients at tertiary care institution in Andhra Pradesh, south india.

II. Material and methods

Clinical records of all patients who were diagnosed as acquired syphilis at the STD clinic of Govt General Hospital, vijayawada, from January to December 2014, constituted the data base of this one year retrospective study. Epidemiological data including the age, sex, marital status, sexual behavior along with clinical examination including morphology of ulcer, rash, lymphadenopathy, and stage of syphilis were recorded. Serology for Rapid Plasma Reagin (RPR) test was done and confirmed by Treponema Pallidum Haem Agglutination (TPHA). CSF RPR & TPHA test were done in all syphilis patients. HIV testing was done in all these syphilis patients irrespective of their disease stage along with CD4 count. Skin biopsies were done in 5 patients and 3 reports came in favour of secondary syphilis. All these patients were given adequate treatment as per NACO guidelines.

III. Results

Total number of patients attended the STD clinic from january to December 2014 were 506. 12 patients were diagnosed to have Syphilis, out of them 6 (50%) were males and 6 (50%) were females. 75% (9) were married and 25% (3) were unmarried. Only three patients were less than 20 years of age. Primary syphilis was diagnosed in 2, Secondary syphilis was diagnosed in 10 patients with positive RPR test confirmed by TPHA. One patient had both primary and secondary syphilis. The commonest manifestation was maculo papular rash and condylomata lata. 11 patients were serologically positive for HIV. CSF RPR & TPHA were positive in 8 patients.

IV. Discussion

Out of 506 total STI patients, 12 (2.3%) were diagnosed as having Acquired syphilis. The Male/ Female ratio being equal. Most of the patients were young adults, with the age groups ranging from 16 to 35 years, the mean age was 25 years.. Promiscuous behavior was noted in 64% of patients. 9 (75%) were married and 3 (25%) were unmarried. Homosexuality was noted in 2 (16.6%) male patients.

2 patients had primary syphilis, and 10 patients had secondary syphilis. one patient had both primary and secondary syphilis. Out of the 10 patients suffered with secondary syphilis, non itchy maculopapular rash

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was observed in 5 (50%) patients. 5 (50%) patients had maculopapular rash and condyloma lata. Palmar syphilid was seen in one patient, annular syphilid in one patient, 90% of patients with secondary syphilis had significant generalized lymphadenopathy.

All these patients serum showed positive result for RPR test, which was confirmed by TPHA . 11 patients were serologically positive for HIV. CSF RPR & TPHA were positive in 8 patients revealing a high rate of asymptomatic neurosyphilis 66% (12 out of 8).

Involvement of CNS occurs in all stages of syphilis (1). About 4 to 24% of patients with untreated primary, secondary and early latent syphilis develop neurosyphilis manifested by presence of abnormalities in the CSF ie lymphocytosis, elevated proteins and reactive VDRL(2).

V. Conclusion

Unsafe sexual practices and HIV Co-infection were observed to be the important contributing factors for rapid progression of syphilis to asymptomatic neurosyphilis. The incidence of neurosyphilis in STI patients in India has been reported to vary from 0.1% to 5.8% (3), but there are no studies in HIV patients. In our study we found 66% high rate of neurosyphilis in HIV patients. Though our study group is small, further studies need to be carried out.

In view of the changing trends of sexual practices, complete treatment of these syphilis patients with HIV is essential along with regular follow up and partner management, as there is a possibility of rapid progression (Acceleration) of syphilis in HIV (4).

Table.1

S.No	Age	Gender	Site of lesion	Pattern of lesion	HIV status	SERUM		CSF		CD4 count
						RPR	TPHA	RPR	TPHA	
1	30	Male	Coronal sulcus	Chancre,MPrash	+ve	+ve	+ve	+ve	+ve	225
2	35	Male	Coronal sulcus	Chancre	+ve	-ve	+ve	-ve	-ve	306
3	26	Female	Labia majora	C.Lata	+ve	+ve	+ve	+ve	+ve	422
4	25	Female	perianal	C.Lata	+ve	+ve	+ve	+ve	+ve	372
5	30	Female	Trunk&limbs	MPrash. C.lata	+ve	+ve	+ve	+ve	+ve	280
6	25	Female	Trunk&limbs	MPrash. C.lata	+ve	+ve	+ve	+ve	+ve	225
7	22	Female	Face&limbs	Annular Syphilid	+ve	+ve	+ve	+ve	+ve	500
8	28	Male	Trunk&limbs	MPrash	+ve	+ve	+ve	-ve	-ve	430
9	16	Male	Trunk&limbs	MPrash	-ve	+ve	+ve	-ve	-ve	Not done
10	18	Male	Palms	Palmar Syphilid	+ve	+ve	+ve	+ve	+ve	190
11	27	Female	Trunk&limbs	MPrash	+ve	+ve	+ve	+ve	+ve	436
12	18	Male	scrotum	C.lata	+ve	+ve	+ve	-ve	-ve	458



Fig 1 Annular Syphilid



Fig 2 Vulval and perianal Condylomatalata



Positive TPHA test



Palmar syphilis

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