

Seroprevalence Of Syphilis In HIV Positive Patients In Central India

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Sir,

Sexually transmitted infections (STIs) are a key epidemiological marker of unprotected sex and therefore the acquisition of and treatment for new STIs in patients with HIV is an indication of high risk sexual behaviors. The sexual risk factors and behaviors associated with acquisition of HIV and STIs are similar.¹

Sexually transmitted infections are major public health problem especially with the advent of HIV/AIDs.⁽²⁾ Prevalence of sexually transmitted infections shows regional variation. Concurrent infections with *Treponema pallidum* and HIV presents serious health problem. HIV alters the

natural history of syphilis and response to therapy. Incidence of neurosyphilis increases among the HIV infected persons, even when treated in complete dosage.⁽³⁾ So we conducted the study to see the seroprevalence of syphilis in and around Nagpur and also its regional variation. The study was conducted in the department of microbiology, Indira Gandhi Government Medical College, Nagpur from January 2012 to May 2013. A total 130 HIV positive patients who attended ART clinic were screened for VDRL (modified VDRL test by star diagnostic, Sypstar). We also studied the seroprevalence of syphilis in healthy population (blood donors) as well as in patients of regional STD centre in Nagpur for the same period.

Table 1: showing seropositivity of syphilis in HIV positive patients (n=130) (titre 1:8 to 1:32)

Age	Male		Female		Total Reactive cases(%)
	No. of patients	Reactive	No. of patients	Reactive	
16-25yrs	15	0	31	1	1 (2.7%)
26-35yrs	12	2	39	1	3(5.88%)
36-45	10	0	15	0	0
>45	4	0	4	0	0
Total	41	2	89	2	4(3.07%)

Table 2: showing seropositivity of syphilis in cases and controls

Samples	Control (Blood Bank)	Cases	
		ART Clinic	STD Centre
Samples screened	5084	130	2789
Reactive Samples	6	4	30
Percentage	0.11%	3.07%	1.07%

In the present study out of 130 HIV reactive patients 41 were male and 89 were female. In this group 4 (3.07%) patients were seropositive for syphilis, 2 males and 2 females. Out of 89 females, 72 were female sex workers, one female sex worker was reactive. In the present study the male female ratio was 1:1. The titres of VDRL reactive

cases was ranging from 1:8 to 1:32. Three patients were from low economic status and illiterate, one from middle class and literate upto graduate.

There has been a dramatic change in the epidemiological profile of STDs all around the world. Viral infections are dominating the STD world today. This could be both due to spread of HIV as an epidemic all over the world and also because of changing sexual practices.³ In the present study the seroprevalence of syphilis was 3.07% in HIV positive patients, which is lower in comparison with other studies in Mumbai 9.1% and Delhi 6-9% in India.^(3,4) The prevalence of syphilis was more in the age group 26-35 years which is the most sexually active age group. Similar findings have been shown by other studies.⁽²⁾ It has also been observed in this study that seroprevalence of syphilis is high (3.07%) in HIV

positive patients as compared to controls (0.11%). Seroprevalence of syphilis is variable in the different regions of the world, Sierra Leone(20%), Ghana (11%), Nigeria (0.5%) , Tanzania (12.8%), Kenya (3%).^{2,5}

Conclusion: we conclude from the study that syphilis is more common in HIV positive patients and seroprevalence of syphilis shows regional variations and is declining over period of time. Early detection and treatment of syphilis in HIV positive patients helps in prevention of neurosyphilis.

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