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A Case Series of Syphilis in Gender Incongruent Individuals Residing in an Urban Slum of a Metropolitan city: Are we letting down the Guard of Contact Tracing?

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Abstract

Introduction: In India, Sexually transmitted infections (STI) have variability in prevalence across different subregions and subpopulations practicing high-risk behavior (the gender incongruent individuals, commercial sex workers, truck drivers etc.). Prevalence of syphilis in gender incongruent individuals is a gray area due to stigma and discrimination associated with the diagnosis. Contact tracing is a boon in better handling the public health burden of STIs. The current case series is to highlight the resurgence of syphilis in gender incongruent individuals and to underscore the importance of screening and contact tracing for the same for public good.

Methods: Twenty one gender incongruent individuals testing positive for Syphilis with the Rapid Reagin Test (RPR) in a period of a year at the Malvani Urban Health Training Center (UHTC), Malvani Slum, Malad, Mumbai; were included in the study.

Results: The RPR titres ranged from 1:2 to 1:64. Out of these twenty one, 4 of them were found to be HIV co-infected. They were counseled and treated according to the standard guidelines. Contacts of partners whom they had intercourse with, in past 3 months could not be traced, as a result of which partner management couldn't be done.

Conclusions: Better patient awareness through counseling and incorporation of information technology can aid in tackling the problem of non compliance with contact tracing. Active screening for HIV should be done in patients with STI.

Keywords: Sexually Transmitted Infection (STI), Syphilis, Gender incongruent individuals, Human Immunodeficiency Virus (HIV), Contact tracing, Urban slum.

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Introduction

Sexually transmitted infections (STIs) are an important public health concern. They are associated with higher reproductive morbidity and also increase the risk of HIV transmission. Prevention and control of STIs is an important prevention strategy for controlling HIV epidemic. A remarkable decline in the STIs was observed after the national AIDS control program was launched. However, the situation still remains shady.

Globally, almost one million new cases of curable STIs are acquired each day[1]. The estimates of low prevalence of STIs in Southeast Asia are countered by limited data availability[1]. Annually, India reports population prevalence[2] of STIs such as syphilis, gonorrhea and chlamydia in the range of 0–3.9%. Higher variability in prevalence is reported across different subregions and subpopulations practicing high-risk behavior[3&4]. A steadily declining prevalence of syphilis among patients with STIs, pregnant women and high-risk groups is reported in India[4]. While the transmission efficiency of HIV is low, varying between one in 100 to one in 1000, syphilis occurs in one in 30 people who come in contact with a carrier.[5-7]

Prevalence of syphilis in gender incongruent individuals still remains a gray area due to stigma associated with diagnosis and inability to make daily wages since most of them are engaged in commercial sex work. The current case series is to highlight the resurgence of syphilis in gender incongruent individuals and to underscore the importance of screening and contact tracing for the same for public good.

The mainstay of public health efforts to stop spread of a particular disease is to identify the case of the contagious disease and follow chains of transmission from the diseased. Contact tracing aids in achieving this objective[8]. Prima facie, finding and tracing people who may possibly cause spread of the disease represents a dilemma between the public health security and rights of the diseased individual. If the disease individual refuses to reveal contacts or if the contacts become untraceable, contact tracing eventually fails. Contact tracing, a public health strategy, was developed for strategically managing STIs such as syphilis and gonorrhea. It gained a lot of importance during the COVID-19 pandemic. Though confidentiality and privacy are maintained in contact tracing, stigma, discrimination, finger-pointing or worse may result of the disease diagnosis in some societies.[8] Gender incongruent individuals being the marginalized sections of our society are vulnerable for such experience, resulting in intentionally hiding the information of the contacts. This case series also highlights the importance counseling the gender incongruent individuals to be better responsible for their health and the health of the community at large.

Material and Methods

All the gender incongruent individuals testing Rapid Plasma Reagin (RPR) positive at the Malvani Urban Health Training Centre (UHTC), Malvani Slum, Malad(W), Mumbai; from May, 2020 to May, 2021 were included in this case series, after taking their informed consent. Their history was taken by the authors maintaining privacy and confidentiality.

Case description:

Twenty one gender incongruent individuals with mean age 31±9.5 years tested RPR reactive in the span of a year. Table no. 1 shows the symptomatology[9] of the individuals being screened by RPR test.

Table 1: Symptomatology of individuals being screened by RPR test.

	Symptom	Frequency (N=21)
1.	Discharge from genitalia	00
2.	Lower abdominal pain	00
3.	Genital ulcer disease – Herpetic	00
4.	Genital ulcer disease – Non Herpetic	02
5.	Genital Warts	00
6.	Anorectal warts	00
7.	Urethral discharge	00
8.	Scrotal swelling	00
9.	Inguinal bubo	00

The RPR titres ranged from 1:2 to 1:64. Out of these, 4 were found to be HIV reactive. All of them were involved in commercial sexual activities;

meeting their sexual partners via mobile (including apps)/internet/railway platforms. Six of them gave history of anal intercourse and 15 of them gave history of oral intercourse with their partners. None of them indulged in group sexual activities. Genital and oral examinations of these patients were done, but no significant lesions were observed except for two. Non herpetic ulcer was found in two of them. None of them used condoms during sexual intercourse. Contacts of partners whom they had intercourse with, in past 3 months were not known, as a result of which partner management couldn't be done. All of them were treated with White Kit (STI Syndromic management, NACO) (Contents: Inj. Benzathine penicillin 2,4 MU + Tab. Azithromycin 1g single dose)

Discussion

As a routine protocol at our UHTC, contact-tracing of sexual partners of patients with STI is done. All patients with STI are interviewed by a medical officer after taking informed consent and maintaining confidentiality and privacy of the patient. We also emphasize on screening for HIV in patients with STI, after taking consent of the patient10. This is the reason why we could diagnose four of them with Syphilis-HIV Co-infection and treat them accordingly. It is thus important that Syphilis-HIV co-infection is given importance similar to TB-HIV co-infection and active screening for HIV is in patients with STI.

This case series highlights two striking facts, first: barrier method of contraception was not used during sexual activity and second: contact tracing failed miserably.

The patients were counseled to either inform their partners themselves, or provide us with the details of the partner. Unfortunately, neither was possible, because the patients apparently did not remember their sexual contacts/partners of the last three months. Non compliance with contact tracing may be attributed either to the stigma and discrimination associated with the disease[8], or to negligence from patients' side. Better patient awareness through counseling can aid in tackling the problem. Also, information technology interventions may incorporated for better contact tracing (for eg, 'Arogya Setu app' used for COVID-19 contact tracing.)

Conclusions

- This case series is a reminder to clinicians, and public health workers, that contact tracing is of utmost importance to curb the increasing feet of syphilis in gender incongruent individuals. Prompt medical intervention in the sexual contacts of those RPR reactive individuals, will help in successfully fighting the dark realities of Syphilis elimination.
- Active screening for HIV should be done in patients with STI. Potentiating research and improving syphilis-HIV co-testing could help in early detection of HIV patients, thereby ensuring timely management.

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Abbreviations: UHTC: Urban Health Training Center; STI: Sexually Transmitted Infection; HIV: Human Immunodeficiency Virus; RPR: Rapid Plasma Reagin.

Ethical Clearance: Taken from Institutional Ethics Committee, Seth GSMC and KEM Hospital, Mumbai.

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