Non-Sexual Transmission of HIV and Syphilis

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ABSTRACT

We all knew that HIV and other STIs are transmitted through sexual contact or through exchange of body fluids like blood, blood products, semen and vaginal fluids, breast milk or through needle sharing, tattoos and vertical transmission. But transmission through skin contact with infectious material (Blood) has negligible risk as per CDC, Atlanta [1]. That too, acquiring two major STIs (Syphilis and HIV) through a single onetime contact with blood is unheard.

Keywords: Non-Sexual, Transmission, HIV, Syphilis

CASE REPORT

A 29-year-old man, married for 2 years, having a child (his wife is on the family way for the second time) was referred to me by a dermatologist from a nearby place for the treatment of reactive serology for syphilis (and HIV). He is already on Anti-retroviral drugs since for the past 7 months. His CD4 count was 441 cells per cu.mm. Syphilitic ‘point of care’ card test and TPHA were reactive and the RPR test was reactive with one in 32 dilutions. He was reactive for HIV 1 infection. He vehemently denies any sort of pre or extra marital exposure to either heterosexual or homosexual activities. There is no history of receiving blood in the past. His wife and first child were nonreactive for both syphilis and HIV. His parents were also nonreactive for both diseases.

On examination, he was not having any signs or symptoms. He was hale and healthy otherwise. He was diagnosed as latent syphilitic with HIV 1 infection.

His only history was that he helped in transferring an individual (woman) to the hospital during a road accident 10 months ago during which time, as per his words, his hands were almost soaked with blood of the deceased unknown individual. Moreover, during 2018 (4 years back), his HIV, TPHA and RPR were nonreactive when he tried for an immigration clearance for the sake of job in a Gulf country.

DISCUSSION

Of course, most often the history may not be reliable always. But here in this case, wife and the child are uninfected. Vertical transmission ruled out by the investigations on parents. No history of transfusion of blood or blood products or sharing of sharp objects like syringe. Moreover, he
was non-reactive for Syphilis and HIV four years back when he was tested for immigration purpose.

The only history in this case, is the contact with the blood of an unknown individual during a rescue operation. Though nonvenereal contact with infectious blood has negligible risk for HIV transmission, we cannot rule out the theoretical possibility of HIV transmission in this case. Transmission of Syphilis through casual contact is much more rare [2]. The presence of two major sexually transmitted infections acquired through casual contact is still more rare. It is obvious that the individual must have had some sort of abrasion or small open injury in his hands at the time of helping the injured. HIV transmission through tattoo (nonvenereal) is reported [3]. Not much reports are available HIV transmission through casual contact.

**CONCLUSION**

HIV transmission through casual contact is rare. Moreover, both Syphilis and HIV transmitted through a casual contact at the same time, as the transmission of syphilis through nonvenereal route is still more rare. One should not ignore this possibility of STI transmission and we have to insist to follow universal work precautions strictly while handling blood, blood products and other body secretions of an individual whose HIV and STI status are not known even in emergency situations. So, this case is worth to be reported to alert the medical profession.

**REFERENCE**