Case Report

A case report on triple combination of HIV, Syphilis and Donovanosis

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Abstract

Syphilis and HIV co-infection are indeed dangerous combinations in addition to these Donovanosisadds to existing morbidity. The present communication describes a case report of concomitant 3 different STD' s in a single patient.
Keywords: Syphilis, Donovanosis, HIV.

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CASE REPORT

A 34 year old sexually active male presented with 2 years history of painful ulcer over penis, the patient gives history of nodules that slowly evolved to red ulcerated lesions over 6 months, and urethral discharge since 6 months, as shown in Figure1 and 2. There is history of pre marital and extra marital contacts with prostitutes. He was diagnosed as a case of HIV 15 years back, his wife was also HIV positive, she expired 8 years back due to unknown illness. Physical examination revealed tender multiple ulcers with beefy red exuberant granulation tissue on the shaft of the penis, bleeding was present on touch. Horizontal group of inguinal lymph nodes were enlarged on both sides.The man was not circumcised, had a below average standard of hygiene. The rest of the physical examination, routine blood and urinalyses were normal. Serotyping for Syphilis was done which showed positive titre for VDRL and positive for Flourescenttreponemal absorption test. Microscopic examination of a Giemsa stained tissue smear revealed numerous rod shaped encapsulated organisms with in histiocytes, as shown in figure 3.A punch biopsy was performed and crushed granulation tissue was air dried on a glass slide which confirmed diagnosis of Donovanosis. Antibiotic sensitivity tests showed sensitivity to Ceftriaxone, Doxycycline, Azithromycin, Penicillin.

Figure 1:

Figure 2:

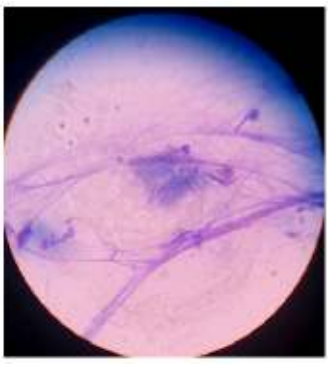

Figure 3:

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DISCUSSION

This is a case of HIV with Syphilis and Donovanosis co-infection which are part of sexually transmitted diseases. The relationship between HIV and STDs is complex and manifold. Sexual contact is one of the mode of transmissions for both infections, thus co-infection is perhaps common.[1] Our case report here showed that sexual behavior is perhaps related to the transmission of syphilis and donovanosis in HIV infected persons. Concurrent HIV infection alters the natural history of the classical STD's and STDs are markers for high risk behaviour for HIV infection. Recent outbreaks of syphilis have been reported in many parts of the world. Studies from developed countries have showed increasing cases of syphilis were among HIV-infected populations.[2,3] Donovanosis is still prevalent and a more recent World Health Organization (WHO) consensus report states that donovanosis has apparently become very rare in Papua New Guinea.[4] In Pondicherry, south India, donovanosis accounted for 14% of genital ulcer cases referred to an STI clinic, 15% of whom were HIV positive.[5] Clinical manifestations of syphilis may be similar to that of non HIV individuals, but there are some differences which can be seen in HIV infected patients. The differences include, HIV positive patients tend to have multiple chancre, a larger and deeper primary lesion, higher rate of asymptomatic primary syphilis, aggressive forms of secondary syphilis and increase rate of early neurological involvement.[6,7] In Donovanosis with HIV the lesion may clinically be larger, extensive and pseudobubo may burst producing ulceration. As treponemapallidium cannot be readily cultured or stained with simple laboratory procedures, Serological tests are the main laboratory investigation to confirm the diagnosis of syphilis. As co-infection is frequent, therefore, all patients with HIV should also be screened for Syphilis infection and vice versa. However limitations patients should be considered when interpreting syphilis serology results in HIV postitive patients. Serological tests for syphilis can be divided into two categories namely non treponemal antibody test and specific treponemal antibody test. The results of both tests may vary in HIV patients. The limitations includeprozone reaction leading to increase false negative non-treponemal antibody test, increased rate of negative serology test in both primary and secondary syphilis, increased rate of serological failure to clear non-treponemal antibody test after treatment. Increased risk of serological failure has been reported to be more common among those with late stage of syphilis and HIV patients In case of Donovanosis gold standard for diagnosis is demonstration of intracellular Donovan bodies by Giemsa, Leishman stain, Histopathology of lesions shows Donovan bodies, Culture, PCR and Indirect immuno flourescence are other methods of detection. In case of syphilis and HIV co-infection, syphilis may also interfere in management of HIV.. Syphilis is associated with increase in plasma HIV viral load and a decrease in CD4 counts.[8]. This phenomenon is mainly seen in primary and secondary syphilis. These levels returned to pre-syphilis levels or improved after syphilis treatment.[9] Treatment of syphilis in HIV-infected and non-HIV is similar. Treatment is given as appropriate for the stage of infection[10]. Penicillin is the antibiotic of choice and it is recommended antibiotic in HIV-infected population because it can reach high concentration in central nervous system for treatment of neurosyphilis which is more common in this population.[7]. Immunodeficiency induced by HIV appears to render Benzathine penicillin G treatment ineffective in substantial no of cases. Donovanosis is usually treated by readily available antibiotics but treatment failure may occur in advanced HIV disease. Drug compliance is often a problem but may be improved by counselling. Early implementation of an eradication programme targeting men with donovanosis could have a significant impact in limiting the spread of HIV in donovanosisendemic countries and would prevent the possibility of both the emergence of drug resistance and treatment failure in individuals with immune impairment. In our case also, the treatment was given according to stage of Syphilis and Donovanosis in HIV and patient recovered well after the treatment in 2 weeks.

CONCLUSION

The importance of this case is not only about HIV with Syphilis and Donovanosis co-infection but to highlight some of the differences in clinical manifestations and serological results of syphilis that might be important for management of such patients. Unless there is a concerted global and politically supported public health drive to reduce transmission of syphilis, this will lead to substantial morbidity and further fuel the HIV pandemic.

REFERENCES

1. Asrul Abdul Wahab et al, Case series of syphilis and HIV co-infections, Pak J Med Sci.2013 May-Jun; 29(3): 856–858.
2. Paz-Bailey G, et al. A case-control study of syphilis among men who have sex with men in New York City. Sex Transm Dis. 2004; 31:581–587.
3. Simms I et al. The re-emergence of syphilis in the United Kingdom: The new epidemic phases. Sex Transm Dis. 2005; 32:220–226.
4. WHO Regional Office for the Western Pacific and National AIDS Council-National Department of Health, Papua New Guinea. Consensus report on STI, HIV and AIDS Epidemiology Papua New Guinea 2000.

5. N O Farell.Tropical medicine series Donovanosis, Sex Transm Infect2002; 78:452-457 doi:10.1136/sti.78.6.452.
6. Zetola NM et al, Syphilis and HIV infection: An update. Clin Infect Dis. 2007; 44:1222–1228.
7. Lynn WA et al, Syphilis and HIV: a dangerous combination. Lancet Infect Dis. 2004; 4:456–466.
8. Buchacz K, Patel P, Taylor M, Kerndt PR, Byers RH, Holmberg SD, et al. Syphilis increases HIV viral load and decreases CD4 cell counts in HIV-infected patients with new syphilis infections. AIDS. 2004; 18:2075–2079.
9. Kofoed K, Grestoft J, Mathiesen LR, Benfield T. Syphilis and Human Immunodeficiency Virus (HIV)-1 coinfection: Influence on CD4 T-cell count, HIV-1 viral load and treatment response. Sex Transm Dis. 2006; 33:143–148.
10. Kingston M, French P, Goh B, Goold P, Higgins S, Sukthankar A, et al. UK National Guideline on the Management of Syphilis. Int JSTD AIDS. 2008; 19:729–740.

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