

CASE REPORTS

MANAGEMENT OF SYPHILIS IN THE PRESENCE OF HIV INFECTION

S N Sonawane, Rajan T Damodaran, B S Yadav

A male patient of secondary syphilis presented with nodular and ulcerative lesions. He did not respond to standard treatment of syphilis with benzathine penicillin, due to associated HIV infection which was subsequently detected.

Key Words : Syphilis, Penicillin, HIV, AIDS

Introduction

The preponderance of acquired immune deficiency syndrome (AIDS) in patients with STD is well known. Immunosuppression in human immunodeficiency virus (HIV) infection leads to florid manifestations of syphilis.

Case Report

A 29-year-old married man presented with complaints of an asymptomatic rash on the face and the trunk of one month duration. He had genital ulcers since 8-9 months. He admitted to multiple, unprotected, penovaginal intercourse with prostitutes since the past 2 years. He neglected the ulcers leading to an increase in its size and a foul smelling discharge was noticed underneath the foreskin. The rash started as asymptomatic nodules all over the body, including the face, palms and soles. Some of these underwent superficial ulceration. He was not a homosexual or IV drug user and had never received a transfusion.

On examination, there were multiple erythematous and hyperpigmented nodules of sizes ranging from 1-5 cms. Some of them were discrete while others around the nose, nasolabial groove and chin were confluent. Most of the nodules were covered with yellowish, adherent crust while some the lesions on the upper limbs showed superficial ulceration. He had multiple, shotty inguinal and firm supratrochlear lymph nodes palpable on both sides. The glans penis bore 3 indurated ulcers with surrounding erythema. The haemogram and blood sugar levels were within normal range. His V D R L test was reactive in a titre of 1:32.

With a diagnosis of secondary syphilis, he was given injections of 2.4 mega units of benzathine penicillin and the dose was repeated after a week. A third dose was given the following week as the lesions showed poor response. Despite such aggressive treatment, the rash prompted us to get him tested for associated HIV infection. The ELISA test was positive on 2 consecutive occasions. Subsequently, his Western Blot test was also positive. He was then treated with 24 million units of injection crystalline

From the Department of Skin and VD, Rajawadi Mun. Gen. Hospital, Ghatkopar East, Bombay - 400 070, India.

Address correspondence to : Dr S N Sonawane

penicillin daily for 10 days during which the lesions cleared with pigmentation.

Discussion

Syphilis is common among patients with HIV infection and the converse is also true. Syphilis may predispose individuals to HIV acquisition or the transmission of either disease could be potentiated by the presence of the other. It is an established fact that genital ulcers predispose to HIV infection.¹ This is due to the high density of T-lymphocytes around the ulcers.² The virus gets easily attached to the receptors on these T-cells.

A modified host response due to HIV infection might alter the clinical manifestations of syphilis. Several case reports describe unusual or florid presentation of this disease in patients with concurrent HIV infection. Most of these patients have compromised CMI which results in failure of penicillin therapy. Case reports of failed conventional syphilis treatment have suggested that benzathine penicillin may not be adequate for syphilis in HIV infected patients. Recent recommendations for treatment of syphilis in the presence of HIV infection reflect this uncertainty. If the patient can be followed up adequately, it is appropriate to institute conventional treatment for the stage of syphilis diagnosed. The management of cases who are unlikely to return for reassessment poses a major problem in the light of the AIDS threat.

The suggestion to treat these HIV positive cases of syphilis with prolonged intravenous penicillin as for neurosyphilis may be impractical due to poor compliance. Mosher proposes a

compromise between conventional treatment and the latter. He recommends three doses of 2.4 million units of benzathine penicillin.³

In view of such vast disagreement, all patients with syphilis (besides other genital ulcer diseases) should be encouraged to accept HIV counselling and testing. Progression of syphilis due to immunodeficiency, which surfaces later, will thus be picked up during follow up and can be treated.

Florid manifestations of syphilis should make one suspicious of concomitant HIV infection⁴ and, thus, order relevant investigations. All patients presenting with genital ulcers should be screened for HIV. In case the patient is unlikely to return until all reports are available, it is advisable to treat all unusual and florid presentations of syphilis with daily injections of crystalline penicillin 24 million units intramuscularly for 14 days to ensure complete treatment.⁵ The VDRL titre is not a good indicator of syphilis in HIV infection as it may vary from a very high reading to negative report even in the presence of active syphilis.

References

1. Simonsen JN, et al. HIV infection among men with sexually transmitted diseases. *New Eng J Med* 1988; 274-7.
2. Stamm E, Handsfield HH, et al. The association between genital ulcer disease and acquisition of HIV infection in homosexual men. *JAMA* 1988; 260: 1429-33.
3. Mosher D. Syphilis, neurosyphilis, penicillin and AIDS. *J I D* 1991; 163: 1201-6.
4. Hicks C B, et al. Seronegative secondary syphilis in a patient infected with the HIV with Kaposi's sarcoma. *Ann Int Med* 1987; 107: 492-5.
5. WHO drug Information, 1992, Vol.6, No. 1; WHO, Geneva.