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PERSISTENT CHANCRE IN SECONDARY SYPHILIS : A CASE REPORT

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ABSTRACT

Syphilis the great imitator presents with protean manifestations. With inadvertent use of antibiotics the incidence was thought to be reduced but cases are being reported. It has various stages and the infectious stage includes primary, secondary and Early latent syphilis. Primary syphilis presents as chancre which resolves on its own after a period of 2 to 6 weeks. The average healing time is 21 days. If untreated they progress to secondary stage which mimics many other skin conditions. The clinical manifestations of the secondary stage are protean and involve any organ. In 10 -40% of patients, the chancre persists even after appearance of the secondary rash. We report a case of 24 years old homosexual male who presented with skin rash, mucosal patches, genital sore and lymphadenopathy. Darkfield microscopy and serology confirmed the diagnosis of persistent chancre in secondary syphilis. He responded well to single dose of Injection Benzathine penicillin.

A 24 years old unmarried homosexual male patient, presented with complaints of painless genital sore for 3 months, skin rash and oral lesion for 45 days. He gives history of unprotected paid ano-insertive sexual act with an unknown transgender 5 months back. He denies heterosexual behavior. Two months after exposure he developed ulcers over the prepucial skin which was completely asymptomatic and hence he has not taken any form of treatment. After one and half months he developed skin rash, oral lesions and one more genital lesion on penile shaft for which he approached our department. He is an alcoholic and cannabis addict. He denies treatment for venereal diseases previously.

General examination revealed lymph node enlargement in cervical and inguinal region. Multiple discrete, mobile, rubbery, non-tender nodes of sizes varying from 2*2 cm to 3*3 cm present on both inguinal region. Cervical lymph nodes were also bilateral, multiple discrete, mobile, firm, non-tender of sizes 5*5 mm to 2*2 cm. .

Patient was afebrile with stable vitals. Systemic examination revealed no organomegaly. His cardiac and neurological status was clinically normal.

Genital examination showed three well defined indurated non-tender ulcers with clean base of varying size and shape on mucosal aspect of prepuce circumferentially(Fig-1). Inflammatory phimosis was present and no induration felt on glans. A single pink papule was present over the ventral aspect of shaft of penis with moist surface(Fig-2). There was no subprepucial or urethral discharge. He had bilateral multiple significant inguinal lymphadenopathy. Nodes were discrete, mobile, rubbery, non-tender of size 2 – 3 cm. Testes, cord structures, anal and perianal region were normal.

Dermatological examination revealed multiple discrete brownish pigmented macules and papules were present over lateral chest wall, axillae, both upper limbs, abdomen(Fig-3), inguinal and thigh region. Buschke Ollendorf sign elicited on papule found to be positive. Single erosion of size 1 * 0.5 cm was present over the right side of lower lip. A single greyish papule with mild crust was present near the left side of angle of mouth(Fig-4). Oral cavity examination revealed three mucous patches of varying sizes ranging from 5 * 5 mm to 4 * 3 cm over the hard palate(Fig-5). Bones and joints were clinically normal.

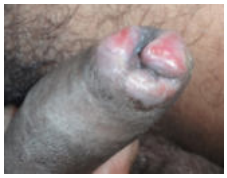

Fig 1a : Multiple Chancre circumferentially on prepucial skin

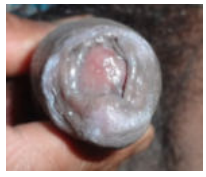

Fig1b :Resolving chancre on prepucial skin

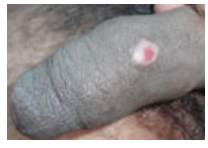

Fig 2a: Papular syphilide on penile shaft

Fig 2b :Resolved post inflammatory hypopigmentation

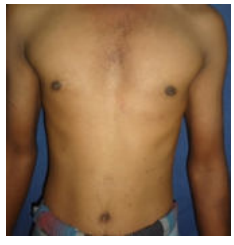

Fig 3a:Maculo papular syphilide on trunk

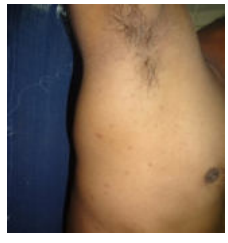

Fig 3b: Maculo papular syphilide near axilla

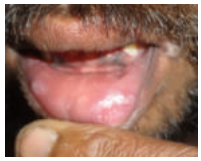

Fig 4a: single ulcer on lower lip and a papule near the angle of the mouth

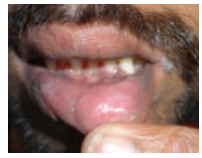

Fig 4b :Resolving ulcer and resolving papule

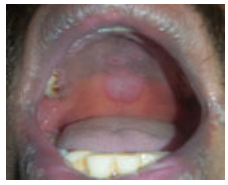

Fig 5: Multiple mucous patches over hard palate

On Dark Field microscopic examination Treponema pallidum was demonstrated from smears taken from chancre and papular syphilide on genitalia. Smear for Gram's stain revealed no organisms. Tzanck smear demonstrated no multinucleated giant cells. Serological evaluation was done with Rapid plasma reagin test to rule out prozone was reactive in 1 : 64 dilution. Treponema pallidum hemagglutination test(TPHA), the confirmatory test was also found positive. HIV ELISA was negative. The classical clinical findings and the laboratory evaluation confirmed the diagnosis of Persistent chancre in secondary syphilis.

The patient was treated with single dose of injection benzathine penicillin 2.4 million units intramuscularly in divided doses on both gluteal region after test dose as per the WHO guidelines. There was no Jarisch-Herxheimer reaction or any other allergic reaction after treatment. The patient was counseled about behavior change, condom promotion, importance of follow-up and further screening.

On follow up the patient showed signs of resolution in all genital and dermatological findings. The disease activity with prognostic serial RPR test was found to be non-reactive after 3 months. The patient is still on surveillance and patient was advised to bring his partner for epidemiological dose.

Discussion

Syphilis is defined by stokes as an infectious disease; due to treponema pallidum of great chronicity, systemic from the outset, capable of involving practically every structure of the body in its course, distinguished by florid manifestations on the one hand and years of completely asymptomatic latency on the other, able to simulate many diseases in the field of medicine and surgery, transmissible to offspring in man, transmissible to certain laboratory animals and treatable to the point of presumptive cure(1).This is rightly quoted by Sir William Osler as 'One who knows syphilis knows medicine'.(2)

The WHO estimates in 2008, there were about 36.4 million adults living with syphilis, with an annual global incidence of about 10.6 million cases. In south east Asia the prevalence is about 1.3-1.5%. The true prevalence is unknown because of inadequate surveillance in resource poor countries. But in last two decades resurgence in syphilis is noted among men having sex with men (MSM) and female sex workers(FSWs)(3).

The extreme fragility of Treponema pallidum facilitates its spread through sexual route. The primary chancre and secondary syphilitic mucosal or moist cutaneous lesions are the sources of treponemes that transmit the disease to the contacts. The incubation period for the primary syphilitic lesion to appear is 9-90 days. The classical feature of primary chancre is single, round or oval, clean looking, dull red, non-tender ulcers with button like induration. The inoculation of organisms at various sites leads to multiple chancre as seen in our case. The natural course of syphilis states that almost all cases of chancre will go for secondary stage if untreated which may be noticed or unnoticed.

The secondary stage begins after 6-8 weeks of appearance of chancre. The widespread dissemination of treponemes due to spirochaetemia cause this stage. It is characterized by mucocutaneous features and generalized lymphadenopathy but any organ can be involved. The skin rash may be macular, papular, papulosquamous or pustular type. The commonest is papulosquamous type but our case had papular syphilide and lymphadenopathy(2). The positive Buschke ollendorf sign(tenderness on pressing the papule with small blunt object) in this case differentiates secondary syphilis from many other condition is due to cutaneous vasculitis in syphilis(4). The mucosal patches will be painless and dull red as typically seen in this patient(2).

In 10-40% of cases chancre may persist even after the appearance of secondary rash as seen here(5). This is due to the prolongation of healing time of chancre (normal healing time of chancre without treatment is 3-8 weeks) or rapid disease progression to secondary stage (disease progression time from primary to secondary stage is 6-8weeks).

The demonstration of etiological agent by dark field microscopy is confirmatory in primary and secondary syphilis and that needs training and experience. We demonstrated the Treponema pallidum in our patient(1). In primary stage serological negativity can occur due to minimal level of antibodies that will be undetectable. In secondary stage excess level of antibodies may mask and present as false negative serology termed as prozone phenomenon(6). Hence dark field microscopy carries its own significance in these stages and serological screening tests to be done in dilutions. Both of these steps were carried out in our department in a perfect way.

As per the WHO guidelines we treated with injection benzathine penicillin and the patient responded well to treatment. Syphilis patients need minimal of 2 years follow up and our case is now in this period.

Conclusion

The infectious syphilis is resurging in high risk groups nowadays with altered manifestations. This patient is also a homosexual men manifested with multiple chancre and overlap of primary and secondary stage. Even though the facilities are available for diagnosis and single dose penicillin treatment, disease transmission is not curtailed and cases are still reported. It may be due to stigmatization associated with disease, high risk sexual behavior or non revelance of all contacts. These barriers have to be overcome in future to control the disease in proper.

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