Case Report

Gummatous ulcer of leg: an uncommon entity in present era

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Abstract

Gummatous ulcer due to Treponematoses is quite rare in present era of potent antibiotics, increased social awareness and due to improvement in living standards of society .Better hygiene and improved medical care have contributed to containment of late benign syphilis or gummas. However, pockets of endemic treponematoses are still persisting in the underdeveloped, third world countries.

Key words: Gummatous ulcer, treponematoses, antibiotics.

Introduction

As literature is full of fundamental facts about syphilis, discussion about etiology and clinical features is hardly necessary. The course of syphilis has been likened to that of an iceberg in sea. Gummatous syphilis falls under late benign stage of syphilis disease. Tertiary syphilis is very rare due to specific antibiotics and good hygiene. Leg ulcer due to treponematous is infrequent phenomenon in present era and is reported sporadically. However, due to lack of surveillance and control measures, a resurgence of syphilis occurred in Western and Central Africa and in Asia Pacific region[1]. Hereby, we report a case of gummatous ulcer of right leg, sequelae of late syphilis.

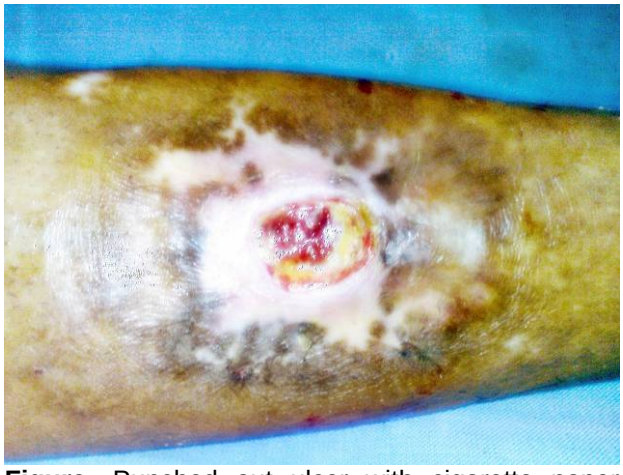

Figure: Punched out ulcer with cigarette paper scarring

Case Report

A 42 year widower presented with history of ulcer on lateral surface of right leg for the last 15 years. There was a past history of unprotected sexual contact 22 years back. He developed a painless ulcer on the glance at that time (after of 30 days of sexual contact), which got healed with some medicines. There was no history of inguinal lymphadenopathy at that time. Subsequently, there was a history of nonpruritic rash allover the body along with fever and weight loss before the appearance of this ulcer on the leg .Patient never suffered with any eye problems nor had signs and symptoms of neurosyphilis .He developed a small nodule on extensor surface of his right leg after a gap seven years which broke down to develop into a ulcer of present size. He got a course of antibiotics from private doctor and had some relief. Leg ulcer never healed completely in spite of medication .Patient was advised blood tests but he never got them done. No history of drug abuse neither there were the marks of any injection over body. No relevant history of tuberculosis. At present, patient presented with punched out right leg ulcer of about 4x2.5 cms size with cigarette paper scarring all around with sanguino-purulent discharge and with dull red granulation tissue in floor. On examination patient was having hepatosplenomegaly, X-Ray chest, skull and right tibia, echocardiography and fundus examination were normal. VDRL test and agglutination test were positive but CSF examination for VDRL test was negative. Serological test for HIV and hepatitis were negative. Clinical diagnosis of gummatous ulcer was made as there was history of unprotected sex with sex worker, history of post-intercourse genital ulcer, non healing chronic ulcer on the leg with positive VDRL and agglutination tests. As

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patient was very anxious and wanted early relief, he was treated by total excision of ulcer up to muscle depth along with parenteral penicillin G. Biopsy report showed chronic inflammatory reaction. Patient is well postoperatively without any recurrence.

Discussion

Chronic ulceration frequently affects the leg, in association with chronic venous sufficiency (45-80%), chronic arterial insufficiency (5-20%), diabetic (15-25%) and rarely due to untreated or partially treated syphilis. Untreated or partially treated syphilis proceed to secondary and then latent stage which may persist for life in an asymptomatic form in 60-70% patients, sudden progress to neurosyphilis(6.5%),cardiovascular syphilis(9.6%) or late benign gummatous syphilis(16%)[2].Presumably due to waning of host immune response, the balance between the organisms which are apparently lying dormant and not producing any evident tissue reaction, suddenly alters and may result in a gummatous reaction in tertiary stage. There are very few organisms in the tissues involved but the local tissue reaction is severe and represent a hypersensitivity reaction[3]. Tertiary syphilis is characterized by the formation of gummas which are soft, tumor like balls of inflammation known as granulomas. The granulomas are chronic and represent an inability of immune system to completely clear the organism. Most lesions occur in the skin and the bones with less frequency in mucosa and certain of the viscera, muscle and ocular structures. Solitary gumma is a subcutaneous process that involves skin secondarily. It is more common on thighs, legs, buttocks, shoulders, forehead and scalp. The gummas produce a chronic inflammatory state in the body with mass effects upon the local anatomy with cigarette paper scarring. Palatal and nasal septal perforations, blindness in one eye, hepatosplenomegaly, anterior bowing and thickening of tibia (sabre tibia) can also develop[4].Only a minority of patients with untreated syphilis develop late sequelae, about 15% having gummatous lesions with skin and bone among the possible sites[5].The tibia is the bone most commonly affected[6] .Gummatous ulcer can be present on other site like face, auricular region, penis and rarely eye [7,8,9].Treatment of early syphilis is parenteral penicillin G. Patients with penicillin allergy can be treated with tetracycline or doxycycline. Ceftriaxone may be considered as an alternative therapy, although optimal dose is not yet defined. Azithromycine is drug used but resistance has been reported in few cases.

Conclusion

This case emphasizes the importance of making a precise diagnosis in all cases of intractable leg ulceration before embarking on surgical or prolonged medical treatment for the ulcer.

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