SECONDARY SYPHILIS MIMICKING PALMOPLANTAR PUSTULAR PSORIASIS: AN UNUSUAL CLINICAL PRESENTATION

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INTRODUCTION

Syphilis is one of the common sexually transmitted diseases (STD) in many parts of the world. The skin rash of secondary syphilis is characteristically symmetrical, coppery red and non-itchy. It is never vesicular and very seldom pustular. We present a male patient who had a rare clinical appearance of secondary syphilis mimicking chronic palmoplantar pustular psoriasis.

CASE REPORT

A 38 year old Pakistani man presented to dermatology department of Military Hospital, Rawalpindi, with multiple, red, raised, pustular and scaly asymptomatic lesions on the palms and soles of 3 months duration. His past medical history was unremarkable.

On physical examination he had multiple, symmetrically distributed erythematous plaques with well-delineated margins surmounted by pustules and scales on the palms (fig. 1) and soles (fig. 2). There was paronychia around the fingernails involving nearly all the digits of the hands. Detailed examination also revealed hyperkeratotic lesions in the beard area, skin coloured papules concentrated around the nostrils and the angles of the mouth. There were mucous patches on the tongue and inner aspect of lips. Anogenital examination showed perianal condylomas with no genital erosion, ulceration or old scar mark. His vital signs were within normal limits and systemic examination did not reveal any abnormality.

Two surgical biopsy specimens were obtained from palms for histopathological evaluation. Biopsy finding from a scaly, erythematous plaque was consistent with syphilis i.e. perivascular infiltrate of lymphocytes and plasma cells with endarteritis obliterans (fig. 3). The second specimen from a pustular lesion showed localized epidermal accumulation of numerous neutrophils, lymphocytes and karyorrhectic debris. There was some overlying hyperkeratosis and parakeratosis alongwith lengthening of rete ridges with dilated, tortuous dermal capillaries. This picture was consistent with pustular psoriasis (fig. 4). The patient's venereal disease research laboratory (VDRL) test and trepenoma pallidus haemogbulination (TPHA) were positive in titers of 1:16 and 1:320 respectively.

Pus swabs for culture and sensitivity taken from the pustules of palms and soles did not yield growth of any organism. Other tests like blood complete picture, urinalysis, and renal and liver function tests were within normal limits. Tests to exclude other co-existent sexually transmitted diseases like gonorrhoea, chlamydia, and HIV infection were negative.

The patient denied extra marital sexual contact so only his wife was examined and investigated. She was found to have mucous patches in the mouth and had positive serology for syphilis. Both husband and wife were treated with injection Benzyl Penicillin 10 lacs I.U i.v 6 hourly for 2 weeks and they responded well to treatment (fig. 5,6). They were advised 3 monthly follow-up in the first year and then at 18th and 24th months. Six months after treatment the patient was symptom-free with a positive VDRL in a low titre of 1:2.

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DISCUSSION

Syphilis has been a source of social stigma, morbidity and mortality for centuries. Nobody knows the origin of syphilis, although many hold strong views. There are two widely held theories: the Unitarian and the Columbian. According to the former all the present treponematoses have originated from one tropical disease. According to the Columbian theory, syphilis was imported to Europe in 1493 by the crews of Christopher Columbus`s expedition which reached the West Indies in 1492. Some of the crew members supposedly acquired syphilis from the local women. When Charles VIII of France invaded Naples with mercenaries from all over Europe, spread of the disease was noted in both war camps and was termed French Pox and Neopolitan Pox, respectively [1]. The term syphilis came from a poem "Syphilis, sive Morbus Gallicus" written in 1530 by the Italian poet Hiero Fracastoro. His main character in the poem was an infected shepherd named 'syphilis' [2].

Syphilis is caused by a spirochaete, Treponema pallidum, a thin, tightly wound, spiral shaped parasite 10-13 um long. Shaudinn and Hoffman of Hamburg discovered T. pallidum in 1905 [3].

Syphilis the great imitator' may present to the dermatologist as a sexually acquired contagious disease, or as a congenital infection. If untreated it may pass through 4 stages: primary, secondary, latent and late.

Secondary syphilis is the stage when generalized manifestations occur on the skin and mucous membranes and sometimes in internal viscerae as well. The cutaneous lesions are characteristically coppery red, symmetrical and non itchy. Vesicles are virtually never seen in secondary syphilis [4]. Rarer reports of vesicular and pustular eruptions in adults with secondary syphilis have been published. Lawerence P et al [5] described a patient with bullous pemphigoid like eruption and a positive VDRL in whom treatment with a course of procaine penicillin

Fig. 1: Erythematous plaques with overlying pustules and scaling on the palms.

Fig. 2: Erythematous plaques with overlying pustules and scaling on the soles.

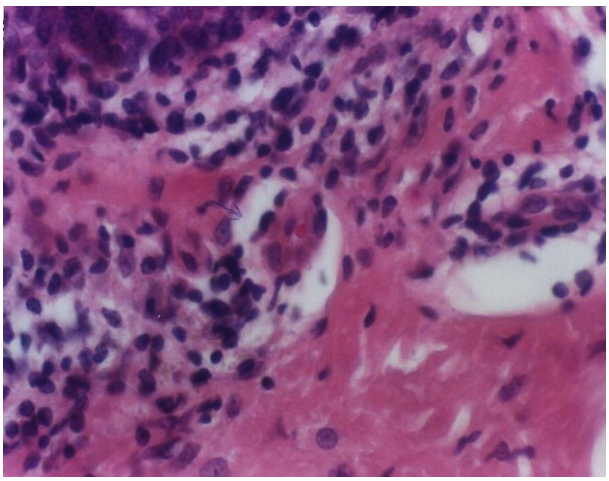

Fig. 3: Perivascular infiltrate of lymphocytes and plasma cells with endarteritis obliterans (H&E, x 40).

resulted in rapid permanent resolution of eruption.

Pustular secondary syphilis includes several morphologic variants. 'Miliary pustular eruption [6] is characterized by small accuminate pustules and papules which resolve with depressed pigmented scars. Pustular lesions with crusting resembling yaws are seen in 'framboesiform syphilis' [7]. In'impetiginoid' or 'ecthymiform' [8] eruptions, flat pustules become confluent and covered with a large crust. 'Malignant syphilis' [9] also known as 'lues maligna', 'rupial syphilis' or 'pustulo-ulcerative syphilis' present with widespread papulopustules that become necrotic and breakdown into ulcers covered by layers of thick, dirty looking crust resembling an oyster shell (rupioid). The eruption, which involves predominantly the face and scalp, is associated with toxicity, fever, arthralgias and occasionally hepatitis. Apparently, malignant syphilis was more common in the seventeenth century, when it was called 'le grand verole'. Exuberant nodulo-ulcerative lesions on palms mimicking lesions of Milker`s Nodule have been described [10]. There is a resurgence of syphilis in the HIV era, presenting with unususal clinical features. A greater awareness of the clinicopathologic features of the disease is, therefore, desirable [11].

Psoriasiform lesions [12] can be seen in secondary syphilis especially in dark skinned races but lesions mimicking pustular psoriasis have rarely been reported. We have presented a rare case of secondary syphilis where lesions on the palms and soles closely mimicked palmoplantar pustular psoriasis supported by the histopathological evidence and the sterility of the pustules.

We believe that syphilis still has high prevalence in the developing countries. High prevalence rates can be expected in the developing world where history of extra marital sexual contact is not given voluntarily. Syphilis, the great imitator and the great masquerader is still around to challenge the diagnostic skills of dermatologists.

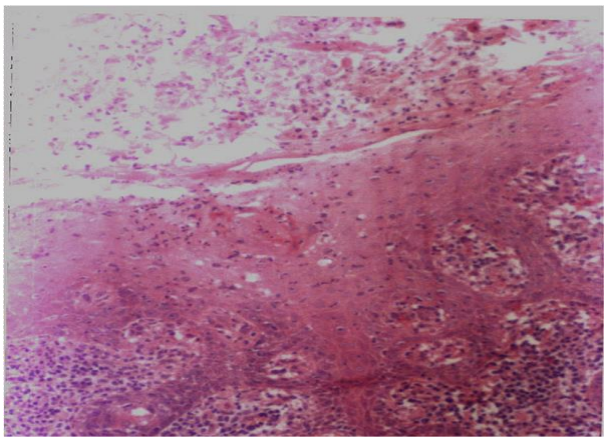

Fig. 4: Accumulation of neutrophils in the epidermis with overlying parakeratosis and hyperkeratosis and lenghthening of rete ridges. (H&E x 40).

Fig. 5: Lesions on palms at the completion of penicillin therapy.

Fig. 6: Lesions on soles at the completion of penicillin therapy.

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