

VITILIGOID MACULES AS MANIFESTATION OF SECONDARY SYPHILIS

K Pavithran, O K Sarangapani and C Gangadharan

A young man developed multiple, bilateral, depigmented, vitiligoid macules on his palms and soles, along with roseolar rashes on the trunk and generalised lymphadenopathy as a manifestation of secondary syphilis. There was no associated melanoderma. Blood VDRL was positive 1 : 128 and histopathology was suggestive. All the manifestations disappeared following treatment with penicillin.

Key words : Vitiligoid macules, Secondary syphilis.

Pigmentary alterations either in the form of hyperpigmentation or as hypopigmentation may follow the resolution of cutaneous lesions of secondary syphilis. Leucoderma coli, the residual depigmentation on the skin of the neck is found not infrequently in dark-haired people who have suffered from secondary syphilis.¹ This depigmentation is not influenced by treatment² and persists for life. Leucomelanoderma of the palms and soles, though classically seen in late syphilis,^{3,4} has been observed in early syphilis also.⁵ We observed a case of secondary syphilis having multiple vitiligoid depigmented macules on his palms and soles, which appeared simultaneously with the roseolar rashes and subsided within 6 weeks after specific treatment, leaving no trace of hyper or hypopigmentation.

Case Report

A 30-year-old bachelor was seen with asymptomatic, multiple, discrete depigmented macules on both palms and soles, of two weeks duration. He had an ulcer on his genitalia, 2 months prior to the onset of these skin lesions, for which no treatment was received. He gave history of frequent sexual exposures, but denied any history of skin lesions in the past. On examination, the epitrochlear, posterior cervical and inguinal lymph glands were enlarged,

discrete, firm and non-tender. There was a healing ulcer on the glans penis, and bilateral, symmetrical roseolar rashes on the trunk. The palms and instep of the feet showed multiple, discrete, rounded 0.5 to 1 cm, vitiligoid depigmented macules (Fig. 1). There was no atrophy or associated hyperpigmented areola. A few coppery macules were seen on the fingers. Other systems were clinically normal.



Fig. 1. Discrete depigmented macules on the palms.

Routine investigations on blood, urine and stools and a chest radiograph were normal. Blood VDRL test was positive at a dilution of

From the Department of Skin and VD, Medical College Hospital, Kottayam, India.

Address correspondence to : Dr. K. Pavithran.

1 : 128 on two occasions. A dark ground examination of the serum got after abrading the roseolar and vitiligid macules failed to reveal *Treponema pallidum*. Biopsy of the depigmented lesion revealed endothelial proliferation of the dermal vessels resulting in endarteritis obliterans. Mild cellular infiltration consisting of lymphocytes and plasma cells was noted around the blood vessels. The patient was treated with an injection of 2.4 mega units of benzathine penicillin. A febrile (39°C) Herxheimer reaction was noted 9 hours after the injection. The roseolar rashes and the coppery macules subsided within 2 weeks after the treatment, while the depigmented macules took 6 weeks for complete disappearance without hyperpigmentation or hypopigmentation. Follow-up of the patient showed a fall in VDRL titre to 1 : 64 in 2 months, 1 : 32 in 3 months, 1 : 8 in 6 months and non-reactivity at the end of one year after treatment. A CSF study done at this time revealed no abnormality.

Comments

Recently, Fiumara and Cahn⁶ reported two cases of secondary syphilis having depigmented macules along with other types of secondary syphilitic rashes and generalised lymphadenopathy. Vitiligid depigmented macules unassociated with hypermelanosis as a manifestation of secondary syphilis were reported from India by Pandhi et al.⁷ In our case, positivity of blood VDRL test in a high titre, generalised lymphadenopathy, a febrile Herxheimer reaction following penicillin therapy, accompanied by regression of the lymphadenopathy, subsidence of the

roseolar rashes and considerable fall in the VDRL titre, support the diagnosis of secondary syphilis. Absence of the perivascular cuffing and *Treponema pallida* in the lesions are not unusual in the early roseolar stage of secondary syphilis. Subsidence of the depigmented macules after specific treatment for syphilis and characteristic pathologic changes in the dermal vessels underlying these vitiligid macules suggest that these were also the manifestation of secondary syphilis. The exact mechanism of this depigmentation is not known. Functional inhibition of the pigment cells by *Treponema pallida* within the macular or papular rash has been suggested. Since this disability disappears, after a time the skin is restored to normal.⁸

References

1. King A and Nicol C : Venereal Diseases, 3rd edition, The English Language Book Society and Bailliere Tindall, London, 1975; p 34.
2. Chargin (1920) : Quoted by Sutton RL : Diseases of Skin, CV Mosby Company, St Louis, 1956; p 392.
3. Bedi BMS and Arunthathi S : Leucomelanoderma—diagnostic sign of syphilis, Ind J Dermatol Venereol Leprol, 1972; 38 : 235-237.
4. Willcox RR : Text Book of Venereal Diseases and Treponematoses, Heinmann, London, 1964; p 192.
5. Pandhi RK, Bedi TR and Bhutani LK : Leucomelanoderma in early syphilis, Brit J Vener Dis, 1975; 51 : 348.
6. Fiumara NJ and Cahn T : Leukoderma of secondary syphilis; Two case reports, Sex Trans Dis, 1982; 9 : 140-142.
7. Pandhi RK, Bedi TR and Bhutani LK : Leukoderma in early syphilis, Brit J Vener Dis, 1977; 53; 19-22.
8. Stokes JH, Beerman II and Ingram NR : Modern Clinical Syphilology, 3rd edition, WB Saunders, Philadelphia, 1945; p 678.