POST KALA AZAR DERMAL LEISHMANIASIS

Bela B Padhiar, Umesh K Karia, R C Rawal, FE Bilimoria

A 26 - year - old Muslim male patient of Bihar presented with multiple asymptomatic hypopigmented macules and nodules mainly over back, abdomen, extremities and scrotum. Clinical examination revealed hypopigmented macules on back, abdomen, extremities with nodular lesions on the scrotum. Common warts were present on dorsa of hands. Skin biopsy was helpful in diagnosis.

Key words : Leishmaniasis, Post kala azar dermal leishmaniasis

Introduction

Post Kala azar dermal leishmaniasis is caused by *Leishmania donovani*, transmitted peridomestically. In over 90% of cases the infection is subclinical and cutaneous hypersensitivity and immunity develop.[1] Later on parasite invades and multiplies in reticuloendothelial system. Organ function is usually well preserved until late in the disease, but specific and non-specific indices of cell -mediated immunity are depressed and secondary infections are common and often fatal.[2]

A rash develops after the visceral disease is healed. A small proportion of patients give no previous history of visceral disease. A rash develops 1to 2 years after recovery as hypopigmented macules similar in appearance and distribution to those of lepromatous leprosy. Diffuse nodulation develops in these macules after a variable period. The rash is progressive over many years and seldom heals spontaneously. Tongue, palate and genitalia may be involved. There may be lymphadenopathy but viscera are spared. Post kala azar dermal leishmaniasis is diagnosed by positive skin smear for leishmania body, biopsy, antibody to leishmania species as demonstrated by indirect immunofluorescence and ELISA Leishmanin test is usually negative after successful treatment.[3]

From the Department of Skin and Venereal Diseases, Civil Hospital, Ahmedabad, India.
Address correspondence to :
Dr Bela B Padhiar,
Flat No. 329/1, 'Satya'
Sector -7A, Gandhi nagar -382007.

Case Report

A 26- year-old Muslim male patient of Bihar presented with multiple asymptomatic hypopigmented macules and nodules mainly

over back, abdomen extremities and scrotum since last 3 years. He suffered from Kala-azar 4-5 years back and was treated in Bihar for the same. Clinical examination revealed hypopigmented macules and nodules over the back, abdomen, extremities and scrotum. Inguinal lymph glands were enlarged and non - tender. Common warts were present on dorsa of hands. Cutaneous sensations were normal and peripheral nerves were not thickened . He had splenomegaly. Repeated slit -skin smears for AFB were negative. Skin biopsy from one of the lesions revealed dermal infiltrates of lymphocytes, plasma cells and histiocytes. Peripheral smear showed *Leishmania donovani* body. Patient was treated with rifampicin 450 mg once a day and ketoconazole 200mg daily.

Discussion

Presence of asymptomatic hypopigm - ented macules with past history of symptoms suggestive of Kala azar, associated lymphadenopathy and demonstration of leishmania bodies in peripheral smear suggested a diagnosis of post Kala azar dermal leishmaniasis in our patient. Histopathological study of skin biopsy specimen further confirmed the diagnosis. Absence of nerve involvement and sensory symptoms and absence of acid-fast bacilli in the skin smears excluded lepromatous leprosy in our patient.

References

1. Pampiglione S, Manson - Bahr PEC, La Placa M, et al. Studies on Mediterranean Leishmaniasis.³ The leishmanin test in Kala-azar. Trans Roy Soc Trop Med Hyg 1975 ;69 ; 60 - 68.

2. Ho M, Koech DK, Iha DW, et al. Immunosuppression in Kenyan visceral leishmaniasis. Clin Exp Immunol 1983;51: 207 - 214.

3. Haldar JP,Ghose S, Saha KC, et al. Cell mediated immune response in Indian Kala-azar and post Kala-azar dermal Leishmaniasis. Inf Immunol 1983 ; 42 : 702-707.