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Case Report

Keloid Like Lesions in Leprosy – An Unusual Presentation

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Lepromatous leprosy presents with symmetrical hypopigmented patches, nodules and plaques. Keloid like lesions are very rare. We describe a keloid like plaque in 28-yr-old male having multiple well defined erythematous to hyperpigmented firm plaques and nodules present over left side of forehead, upper part of nose and left infra orbital area. Slit skin smear from the nodule on the hand showed bacillary index of 6+ and morphological index of 8%.Histopathological examination of plaques over forehead and left hand showed grenz zone, multiple foamy histiocytic granulomas and lymphocytic infiltration around sweat glands, and neurovascular bundles in the dermis suggestive of lepromatous leprosy. These lesions had multiple acid fast bacilli on Fite Faraco staining

Key words : Leprosy, Histoid, Keloidal Lesions

Introduction

Lepromatous leprosy usually presents as a generalized disease with numerous patches, papules, nodules or plaques distributed symmetrically. Nodules in lepromatous leprosy are usually generalized, but a single nodule or a localized group of nodules; localized linear lesions etc with minimally infiltrated surrounding skin are also reported (Mohamed 1998, Vijay kumar et al 2001, Thappa et al 2002). As the disease progresses, nodules and plaques appearing on the face may present as the classical leonine facies. Histoid leprosy is an uncommon variant and presents as smooth, shiny, dome shaped, firm nodules appearing on otherwise normal looking skin (Kumar and Dogra 2014). Though extremely uncommon, single or multiple keloid like lesions have been documented in lepromatous and histoid leprosy (Figueira et al 2017, Yoder et al 1985). We describe a patient with keloid like lesion clinically, which on histopathology showed lepromatous leprosy.

Case report

A 28-year-old male presented with asymptomatic reddish to hyperpigmented raised lesions over left side of the face and on left hand since 1 year.

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He did not have any nasal stuffiness or bleeding. There was no history of preceding trauma. He had not received any treatment earlier. None of the family members had any skin lesions suggestive of leprosy.

On examination multiple well defined erythematous to hyperpigmented firm plaques and nodules were present over left side of forehead, upper part of nose and left infra orbital area in a segmental manner (Fig 1). Another single firm keloid like plaque of 2X1cm was present over dorsum of left hand (Fig 2). There were no hypopigmented, hypoesthetic patches, or nodules on the rest of the body. There was mild hypoesthesia over forehead lesions, but sensations over hand lesion were normal. There was no glove and stocking hypoesthesia. There were no painful eruptions, painful or tender nerves or other signs or symptoms suggestive of a reaction. Left supra orbital, left greater auricular, left ulnar, and left radial cutaneous nerves were thickened, firm but not tender. General physical examination was normal. There was no lymphadenopathy or organomegaly. Slit skin smears were made as recommended by WHO, stained with modified Ziehl-Neelsen stain and the positivity was graded by Ridley's logarithmic scale (Mahajan 2013, WHO 1992). Slit skin smears from forehead and the keloidal lesion on hand, both showed globi of acid fast bacilli. Slit skin smear from the nodule on the hand showed bacillary index of 6+ and morphological index of 8%. Hemogram, liver and renal function tests, and complete urine examination were in normal range.

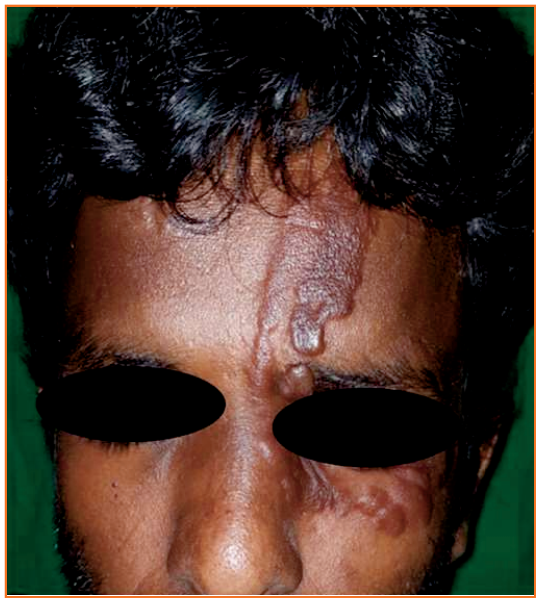

Fig 1 : Hyperpigmented firm plaques and nodules over left side of forehead, nose and left infra orbital area

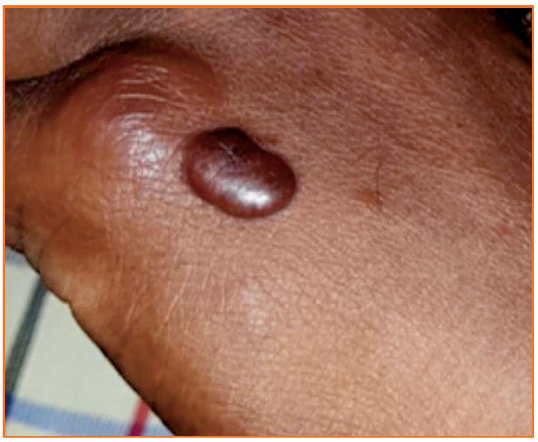

Fig 2 : Firm keloid like plaque over dorsum of left hand

Histopathological examination of plaques over forehead and left hand showed grenz zone, multiple foamy histiocytic granulomas and lymphocytic infiltration around sweat glands, and neurovascular bundles in the dermis suggestive of lepromatous leprosy (Fig 3). Fite Faraco stain

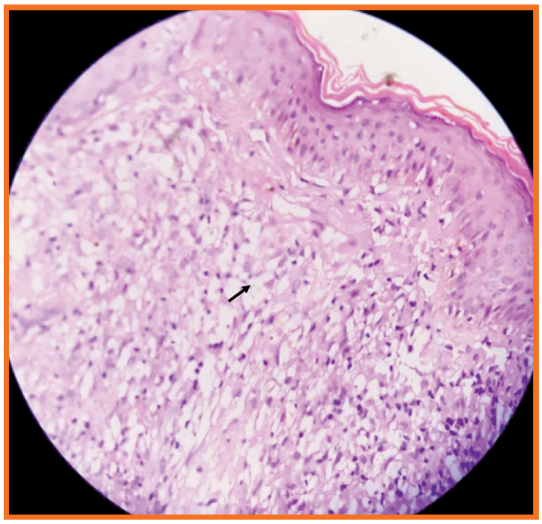

Fig 3: Biopsy from left hand showed grenz zone and multiple foamy histiocytic granulomas (Black arrow) and lymphocytic infiltration (H & E X 100)

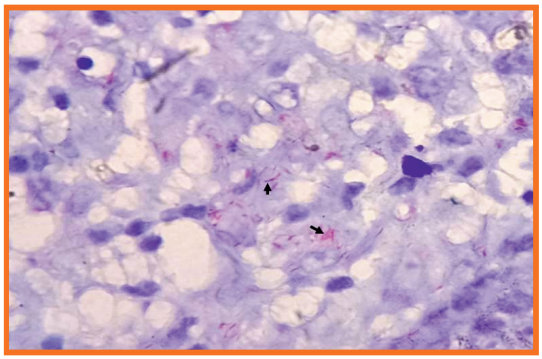

Fig 4 : Fite Faraco stain showing numerous acid fast bacilli (Black arrow) inside the foamy histiocytes, (Magnification X 400)

showed numerous leprabacilli inside the foamy histiocytes (Fig 4). With the diagnosis of lepromatous leprosy the patient was started on MDT-MB as recommended by WHO. After six months of MDT-MB, the lesions on the face and left hand had decreased by 50% and the patient was asked to continue the treatment.

Discussion

Lepromatous leprosy generally presents as symmetric multiple hypopigmented patches, nodules and plaques. Keloid like lesions are uncommon. Our patient presented with hyperpigmented plaque and few discrete nodules over left half of forehead, nose and infraorbital area along with keloid like plaque over dorsum of left hand. Both, the lesions on forehead and hand showed multiple globi on slit skin smear and foamy histiocytic granulomas with multiple acid fast bacilli on histopathology diagnosticof lepromatous leprosy.

A single painful nodule, doughnut shaped nodule, single linear plaque like lesions and localized group of nodules were reported as unusual forms of lepromatous leprosy (Mohamed 1998, Thappa et al 2002). Keloid like lesions are rare in leprosy. Yoder et al (1985) reported lepromatous leprosy in a single keloid like lesion with mild hypoesthesia in a 52-yr-old Indonesian born, settled in USA.Gorin et al (2004) reported keloid like lesions on face in a Haitian female with lepromatous leprosy. Nair et al (2016) also reported keloid like lesions in a case of histoid leprosy. Figueira et al (2017) described multiple keloid like lesions in a 14-yr-old Brazilian male with histoid leprosy, which were treated as dermatofibroma for a period of 2 years. Biopsy of the keloid like nodule revealed multiple spindle shaped histiocytes, arranged in a storiform pattern and Fite stain showed numerous lepra bacilli within the cells. Though keloid like lesions can present de novo in lepromatous leprosy, however, they are more commonly associated with histoid leprosy.

Conclusion

Keloid like lesions (single or multiple) are rare in leprosy. When present, they show histology features of either lepromatous or histoid leprosy. Biopsy is confirmatory and helps in classifying the disease.

References

1. Figueira RBFDC Oliveira KF, Souza LB et al (2017). Wade's histoid leprosy in a 14-year-old teenage boy. *Rev Soc Bras Med Trop*. **50**:562-564.
2. Gorin RJ, Chapik L, Deitz M et al (2004) . Hansen's disease masquerading as facial keloids. *J AmAcad Dermatol*. **50** :3s p98
3. Kumar B, Dogra S (2014). Case definition and clinical types of Leprosy. In: IAL Textbook of Leprosy, Second edition, Kar HK, eds), Jaypee Brothers Medical Publishers, New Delhi, pp 236-253.
4. Mahajan VK (2013). Slit-skin smear in leprosy: lest we forget it ! *Indian J Lepr*. **85**:177-183
5. Mohamed KB (1998). Lepromatous leprosy presenting as a single doughnut-shaped lesion on the face. *Br J Dermatol*. **138**: 560–1.
6. Nair SP, Kumar GN, Mathew R (2016). Histoid Leprosy Presenting with Keloid Like Lesion. *Indian J Lepr*. **88**:117-121.
7. Thappa DM, Dave S, Karthikeyan K et al (2002). Localized lepromatous leprosy presenting as a painful nodule in a muscle. *Indian J Lepr*. **74**:237-242.
8. Vijaikumar M, Laxmisha C, Thappa DM (2001). Localized linear lesions in lepromatous leprosy. *Indian J Lepr*. **73**:343–8.
9. World Health Organization (1992). A guide to leprosy control. WHO, Geneva, 2 edition, 1988; reprint 1992.
10. Yoder LJ, Jacobson RR, Job CK (1985). A single skin lesion-an unusual presentation of leprosy. *Int J Lepr* .**53**: 554-558.

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