

significant in one case of LL leprosy in addition to the changes observed in the BL cases.

Comments

In similar studies, Ramanujam and Ramu³ considered normal skin as 2 mm to 20 mm and Periswamy⁴ as 3 mm away from the margins of the lesions. Shakuntla et al⁵, in addition studied the indeterminate leprosy cases also. Other workers^{6,7} studied only LL cases. Recently, Tutakne et al⁸ have correlated the changes in normal skin with the morphology and histopathology of the lesions in only TT and BT cases. Most of the earlier workers^{1,3,4,9} only demonstrated the bacilli from the scrapings of close contacts^{1,9} or from scrapings of the periphery of the lesions.^{3,4} Similarly histopathological changes in normal skin of all types of leprosy cases have been studied by only a few workers.^{5,10}

Except TT cases, all other histopathological types have shown varying degrees of changes in the normal skin. Some workers^{5,10} have recorded some of these changes even in TT cases.

Ganpati et al¹⁰ classified the exudates into mild and moderate on the basis of number of lymphocytes and presence or absence of histiocytes. The presence of lymphocytes in BT cases and histiocytes in BB cases without acid fast bacilli might represent the earliest immunological reaction to the bacilli in the nearby lesions. Cells in the granulomas in the normal skin around the lesions are similar to those in the lesions but to a lesser degree. No reaction in TT cases could be attributed to the good immune status of the patients in TT cases as also observed by other workers.⁸

Diffuse lymphocytic infiltration in the normal skin hints at the locations and patterns to be searched for in early lesions. Schwann cell hyperplasia and infiltration of nerves by inflammatory cells and bacilli are well known phenomenon in leprosy, but only 25% of the cases have shown these changes. Ganpati et al¹⁰ observed lymphocytic infiltration and Schwann cell hyperplasia in 61% and 79%

respectively. High incidence in their series is probably due to inclusion of cases in the reaction stage. Figures of other workers^{5,11} are even lower than ours.

Epidermal atrophy, subepidermal clear zone and presence of acid fast bacilli were significant in LL and BL cases as also observed by other workers.^{5,10} Acid fast bacilli in the normal skin of LL cases have been demonstrated by various workers.^{2,6,7} Rao et al¹¹ demonstrated appendageal involvement with infiltration of acid fast bacilli in 17.4% of cases. We observed these changes in only one case of lepromatous leprosy.

References

1. Ridley DS and Jopling WH : A five group system of classification, Intern J Leprosy, 1976; 34:255.
2. Khanolkar VR : Perspectives in pathology of leprosy, Ind J Med Sci, 1955; 9:13-23.
3. Ramanujam K and Ramu G : A study of borderline leprosy from the clinical, bacteriological and immunological aspects, Leprosy in India, 1965; 37:303-311.
4. Periswamy V: Differentiation of tuberculoid reactions in borderline and lepromatous cases bacteriologically. Leprosy in India, 1959; 31:103-106.
5. Shakuntla R, Pratap VK, Sharma NK et al : Histologic profile in apparently normal skin of leprosy patients, Leprosy in India, 1982; 54:40-47.
6. Bedi TR, Kumar B and Kaur S : Histopathological study of clinically normal appearing skin in lepromatous leprosy, Leprosy in India, 1979; 51:78-80.
7. Katoch VM, Mukherjee A and Girdhar BK : A bacteriological study of apparently normal skin in lepromatous leprosy, Leprosy in India, 1980; 82: 508-512.
8. Tutakne MA, Das KD, Agarwal SK et al : Study of the skin in the vicinity of well marginated lesions of TT and BT leprosy, Ind J Dermatol Venereol Leprol, 1983; 49:132-135.
9. Desai NM, Parikh AC and Chulwal AR : Symposium on spontaneous disappearance of skin lesions and positive smears without lesion, Intern J Leprosy, 1955; 23:281-290.
10. Ganapati R, Desikan KV and Iyer GGS : Study of apparently normal skin in leprosy, Intern J Leprosy, 1972; 40:281-290.
11. Rao TN, Gottlieb B and Levan NE : Apparently normal skin in lepromatous leprosy, Arch Dermatol, 1975; 111:1571.