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Co-localization of Pityriasis Versicolor and BT Hansen's Disease[1]

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Pityriasis versicolor is a common superficial fungal infection considered in clinical differential diagnosis of leprosy. Studies have reported a higher incidence of *Pityriasis versicolor* in leprosy patients when compared to the general population ([4]), but there are no reports of co-localization of these two infections. We describe a 24-year-old man with *P. versicolor* lesions localized to the plaque of borderline tuberculoid (BT) leprosy.

A 24-year-old male patient from Bihar, India was diagnosed with BT Hansen and started on multi-drug therapy (M.D.T.) (MBR), rifampicin 600mg and clofazimine 300mg once monthly supervised and clofazimine 50mg with dapsone 100mg daily. Two months after starting M.D.T., he developed type 1 reaction and was started on prednisolone 40 mg once daily, which was tapered after the reaction subsided. He also developed xerosis and ichthyosis after starting M.D.T. (clofazimine induced) and was using coconut oil liberally on the lesions. Four weeks after the initiation of steroids he presented with hypopigmented itchy lesions appearing over the pre-existing leprosy lesions on the chest. On examination, he had multiple oval to round hypopigmented scaly macular lesions on the large patches of BT disease on his chest and upper back. The lesions were also present in the vicinity of the patch (Fig. 1). However, other lesions of leprosy on the face, arms and lower back did not show any such change. The diagnosis of pityriasis versicolor was confirmed by potassium hydroxide (KOH) examination showing numerous short thick hyphae with clusters of spores. He was given fluconazole 400 mg single dose following which the versicolor lesions cleared in a month (Fig. 2).

P. versicolor distribution as normal flora is related to sebaceous gland density, and thus the scalp, face, central chest, and back bear the highest number of fungi ([1, 3]). High sebum levels, excessive sweating, warm climate, application of oil, malnutrition, administration of systemic steroids, immunosuppressants, and antibiotics are some of the factors that facilitate rapid growth of fungus ([2]).

Leprosy is characterized by partial or complete destruction of skin appendages including sebaceous glands, so that co-localization of lesions of leprosy and *P. versicolor* is a clinical paradox. Ideally, this

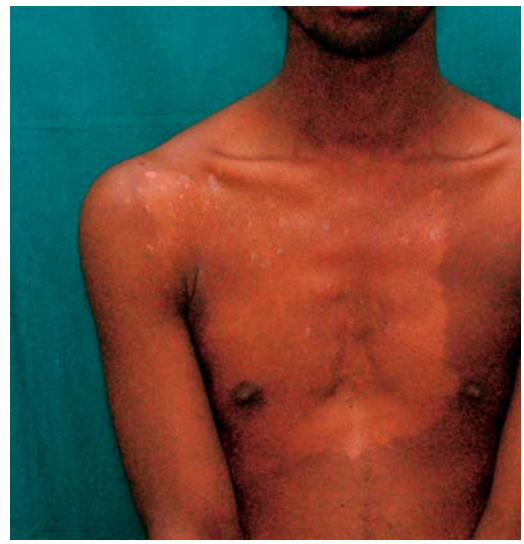

FIG. 1. Multiple oval hypopigmented scaly macular lesions of *P. versicolor* over the patch of leprosy.

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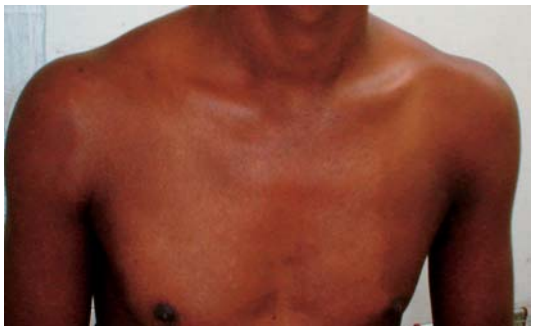

FIG. 2. Lesions of *P. versicolor* cleared after antifungal therapy.

should inhibit the growth of malassezia because most of the species of malassezia are obligatory lipophilic, except *M. pachydermatis* ([1]), which is mainly found in domestic animals like dogs—causing otitis externa—but can occasionally infect humans ([2]). However, culture was not done in our patient to isolate the species.

In our case, administration of systemic steroids could be the major factor that promoted the development of *P. versicolor*. However, preferential localization of versicolor lesions to patches of leprosy is perplexing.

REFERENCES

1. HAY, R. J., and MOORE, M. Mycology. In: *Textbook of Dermatology,* 6th edn. Oxford: Blackwell Science; 1998. pp. 1277–1376.
2. KWON-CHUNG, K. J., and BENNETT, J. E. Infections caused by Malassezia species. In: *Medical Mycology*. Philadelphia: Lea and Febiger, 1992. pp. 70–182.
3. MIDGLEY, G., GUEHO, E., and GUILLO, J. Diseases caused by Malassezia species. In: *Topley and Wilson's Microbiology and Microbial Infections (Medical Mycology),* 9th edn. London: Arnold, 1998. pp. 201–214. 1992. pp. 70–182
4. SINGH, M., KAUR, S., KUMAR, B., KAUR, I., and SHARMA, V. K. The associated diseases with leprosy. Indian J. Lepr. **59** (1987) 315–321.