

Clinical study of nail changes in leprosy and comparison with nail changes in diabetic patients

Abstract

Background

Nail changes in leprotic patients are not specific to leprosy, and may be observed in other peripheral neuropathies. Diabetes is one of the diseases that present with nail dystrophy secondary to peripheral neuropathy, vasculopathy, trauma and infections. Therefore, nail changes in diabetic neuropathy are expected to be very similar to that of leprosy.

Objectives

To evaluate the frequency and pattern of nail changes in Egyptian leprotic patients with the different spectrums of the disease, and to compare nail changes in leprosy with those seen in patients with diabetic neuropathy.

Methods The study included 115 leprosy patients and 60 patients with diabetic peripheral neuropathy. Nail examination was thoroughly carried out and various nail changes were recorded including the location of the involved nails (fingers, toes).

Results

Our study detected similar incidence of nail changes in both multibacillary (MB) (86%) and paucibacillary (PB) patients (86%). Flag sign (alternating horizontal bands of whitish and pinkish discoloration of the nail) observed in our study was not reported before. It was more commonly seen in MB patients (21%) than in PB patients (14%).

Our results also revealed that the nail changes were more commonly seen in leprosy patients (86%) than in diabetic patients (68%).

Conclusion

Nail changes in leprosy are multifactorial, and could be related to one or more of the following: neuropathy, endarteritis, trauma, drugs or superimposed infections. Nail changes in leprosy may be used as an additional clue that helps in the diagnosis

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