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Letter to Editor

Leprosy Interpreted as Diabetes Related Complications

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Dear Editor,

Leprosy is an insidious disease which is still one of the leading causes of peripheral neuropathy worldwide (Bhat and Prakash 2012). It is caused by *Mycobacterium leprae,* which was the first organism to be associated with a disease process in humans when it was discovered by Hansen in 1873 (Hansen 1874). The diagnosis of leprosy in the clinic today is based on the presence of hypopigmented patches which are anaesthetic,

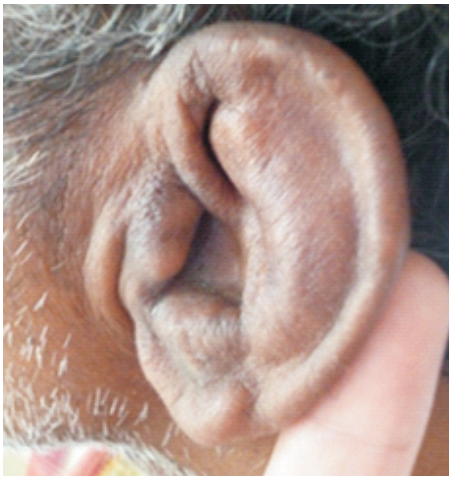

Fig 1.1 : Left Ear

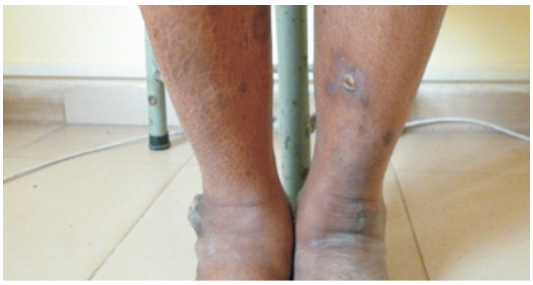

Fig 1.2 : Right and left lower limbs

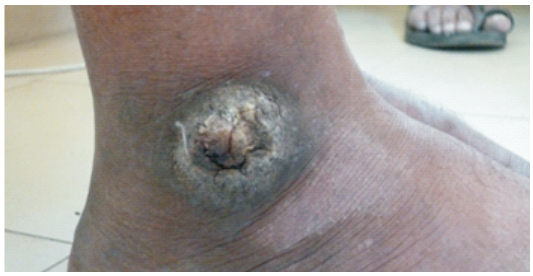

Fig : Pictures taken with consent on 03/06/2013

Patient RP–treated for several years for complications of diabetes mellitus until thickening of the ear lobes was identified on examination (Fig 1.1.), with bilateral thickening of the peripheral nerves and hyperpigmented anaesthetic patches and skin changes in the lower limbs.

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the presence of enlarged peripheral nerves and the presence of acid fast bacilli (AFB) on slit skin smears. One of these three criteria is required for a definitive diagnosis of leprosy (ILEP 2001). Recently we have observed several cases of late presentation of leprosy due to misdiagnosis as complications of diabetes mellitus. Despite Hyderabad being an endemic region for leprosy this differential diagnosis has often not been considered.

A number of cases have previously reported misdiagnosis of leprosy. Aftab et al and Simeoni et al both report cases of leprosy misdiagnosed as sarcoidosis (Aftab et al 2012, Simeoni et al 2011) with the later also describing cases of other rheumatological misdiagnosis (Simeoni et al 2011). Kim et al report a misdiagnosis of leprotic neuropathy as chronic inflammatory demyelinating polyneuropathy (Kim et al 2012). There are no reports of leprosy being misdiagnosed as complications of diabetes.

In India in 2010, 50.8 million adults where known to be diabetic. By 2030 this will have risen to 87 million (Ramchandran et al 2010). In 2011, there were 127,295 newly registered cases of leprosy in India (WHO 2012). Worldwide there are still a significantly large proportion of patients presenting with grade 2 disability (WHO 2012). This is despite awareness and education campaigns for clinicians that early diagnosis and treatment cures disease and prevents disability.

In a region where both diabetes and leprosy are endemic (Ramchandran et al 2010, WHO 2012). It is vital that clinicians consider the two in their differential diagnosis when presented with complications of one or the other. Izadyar et al, highlight this reporting a case of a patient with poorly healing ulcers affecting the extremities which they diagnosed as leprous neuropathy. In this article they stress that although diabetes is the commonest cause of peripheral neuropathy the clinician should always consider the spectrum of both hereditary and acquired causes (Izadyar et al 2009) in their differential. Given the prevalence of both leprosy and diabetes in India this is especially important to avoid misdiagnosis and late presentations which will help to reduce the burden of disease created by late diagnosis and treatment of leprosy (WHO 2011).

Permission & Acknowledgements

Full informed consent for the use of the case and photographs in figure 1 were obtained from the patient. We, the authors, would like to thank the patient for their time and cooperation.

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