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Letter to the Editor

Comment on "Father-Daughter Duo: How Unmasking Leprosy in Father Helped in Leprosy Diagnosis in Daughter - A Case Report"

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Tuberculosis and leprosy are both endemic infections in India, but their co-infection is rarely reported. Since it has implications on management, correct diagnosis is important. In all patients of leprosy, WHO recommends contact tracing and examination of close contacts to rule out leprosy since they are at a higher risk of infection. If diagnosed, it is imperative to manage the patient appropriately according to the standard guidelines. We hereby wish to raise a few points regarding diagnosis and management of a patient of erythema nodosum leprosum and his daughter described by Parikh et al in the case report: "Father-Daughter Duo: How Unmasking Leprosy in Father Helped in Leprosy Diagnosis in the Daughter - A Case Report"

Key words: TB (Tuberculosis)-Leprosy Coinfection, Contact Tracing, Erythema Nodosum Leprosum

Sir,

We read with interest the article titled "Father-Daughter Duo: How Unmasking Leprosy in Father Helped in Leprosy Diagnosis in the Daughter - A Case Report", where the authors discussed a case treated earlier for tuberculosis (TB) presenting with erythema nodosum leprosum (ENL). Herein, diagnosis of leprosy in the father helped in the detection of leprosy in his daughter after examining other family members as part of contact tracing (Parikh et al 2022). As described in the case report, TB (organ involved not mentioned) was diagnosed 1.5 years prior to the diagnosis of leprosy and was treated with ATT (rifampicin was given only for 2 months as mentioned). Whilst both leprosy and TB are endemic in India, there are only a handful of case reports of coinfection (Prasad et al 2010, Masuka et al 2021). Since they were not present at the same time in this patient, it is not essential to discuss its implications- which formed major part of discussion in the publication. The authors have erroneously highlighted that the history of TB treated with anti-TB drugs could be responsible for the presentation of the patient with ENL. Type 2 reaction or ENL is a hypersensitivity reaction to the lepra bacilli which interrupts the usual indolent course of leprosy. Co-infections

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like tuberculosis, hepatitis B and C may trigger or cause recurrent/chronic ENL, however, in this case the patient had been adequately treated for TB and did not have any evidence of active disease.

While it mostly presents during or after treatment with MDT, it is not uncommon for ENL to be the presenting feature of a patient in the lepromatous spectrum (Kumar et al 2004). As in this case, diffuse infiltration may go unnoticed by the patient and the presentation can be the occurrence of ENL with systemic symptoms. The authors further state that the patient had only ENL and no active lesions suggestive of leprosy. The patient according to authors own description had infiltration of ear lobes and eyebrows, superciliary madarosis, supraclavicular, ulnar, radial cutaneous, lateral popliteal and posterior tibial nerves were thickened and had glove and stocking anaesthesia - this is more than a book picture of a case of lepromatous leprosy (LL). The patient was also found to have glove and stocking 'anaesthesia' on examination but had no history of accidental slippage of footwear. While a patient with hypoesthesia, especially fine sensory loss may have no impairment of activities of daily living, it is highly unusual in a case with almost complete anaesthesia (Das et al 2020). Slit skin smear (SSS) done from ear lobes and eyebrows- (but not from a nodule or an infiltrated lesion) was negative. But with a BI of 4+ in the skin biopsy- it is very unusual for SSS to be negative in such a patient if SSS was carried out appropriately.

The main objective of reporting the case was to highlight the diagnosis of leprosy in daughter of the index case. It is well known that close contacts of patients with leprosy have a higher risk of developing the disease. Household contact is defined as a person living in the same dwelling and sharing the same kitchen with the index case. WHO recommends contact tracing by line-listing in all patients and examination of close contacts to rule out leprosy (WHO 2020). The daughter was found to have leprosy and noted to have neuritis of the left ulnar nerve as indicated by tenderness. Yet the patient was treated with MDT alone, whereas use of corticosteroids is strongly recommended in the treatment of neuritis to prevent nerve function impairment and permanent disability (Ebenezer & Scollard 2021).

In conclusion, the published case report simply describes a case of LL with ENL (with many details lacking) and on screening of the family members- the daughter was found to have leprosy- which unfortunately was not labelled properly and not managed appropriately. On the description of the lesions, the daughter was diagnosed to have borderline leprosy- and the same label was maintained even after all the investigations and biopsy. The diagnosis should have been more specific in the disease spectrum – BT, BB or BL at least in an academic reporting. There is mention of administration of steroids for the management of ENL in the index case- but dosage and duration are not given.

The title and the total presentation make this simple scenario look quite complicated and the approach to the whole problem makes it more confusing.

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Note : This letter was sent to Dr FA Parikh, however, no response was received from Dr Parikh – Editor