Hansen’s disease: An unusual presentation

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Abstract
Hansen’s disease can present with varied and subtle symptoms which can be missed. A middle-aged gentleman presented with swelling of face and hands. Detailed examination and investigations confirmed borderline tuberculoid leprosy with lepra reaction. A high index of suspicion with vigilance can help to make an early diagnosis in this potentially treatable condition.

Keywords: Hansen’s disease, skin induration, lepra reactions

Introduction
Hansen’s disease is an ancient devastating disease known to man since the beginning of medicine. It is a disease associated with significant stigma. Although this disease is easily treatable, diagnosis can be missed due to its subtle and varied presentation. In addition, in countries with poor health-seeking behavior patients may present late. Here, we present the case of a patient with Hansen’s disease with an unusual presenting problem.

Case Report
A 52-year-old manual laborer from a village in South India with no known comorbidities presented with complaints of sudden onset swelling of his face and hands over 10 days. He had no history of swelling of any other areas of his body or swelling of the tongue. There was no breathlessness, wheeze, decreased urine output or history of having consumed any drugs, or food to which he was allergic. He had received anti histaminins, however, had no improvement. On examination, he had thickened skin and induration of the skin over his fingers [Figure 1]. The possibilities considered at that time were, a sudden anaphylactic reaction or a disease infiltrating the skin such as sarcoidosis, amyloidosis, or granulomatous infections of the skin. Further examination revealed injuries on his fingertips that he had not noticed and Charcot’s joints in the left hand. He also had bilateral partial ulnar clawing of his hands. Examination of the rest of his skin revealed two hypopigmented patches on his gluteal region and knees [Figure 2]. Sensory examination revealed that the patches were hypoesthetic, and his nerves were thickened. Other systems were normal. Thus, a clinical diagnosis of Hansen’s disease in lepra reaction was made. However, he denied any contact with any person with Hansen’s. He underwent slit skin smears which were negative for Hansen’s disease. Due to a high index of suspicion, he underwent a skin biopsy which showed features suggestive of borderline tuberculoid leprosy [Figures 3 and 4]. He was hence started on multidrug therapy with steroids and showed dramatic improvement.

Discussion
Hansen’s disease is caused by acid-fast bacteria, Mycobacterium leprae. It is transmitted from person to person by prolonged exposure, both through respiratory route and direct contact. The bacteria has an affinity for the peripheral nerves and the skin. It causes granulomatous destruction of the nerves and results in hypo aesthetic, hypopigmented patches on the skin.[1]
Hansen's disease cause devastating deformities which incapacitate its victims. T-cell dependent immune deficiency predisposes to Hansen's disease. With diseases such as HIV and diabetes affecting the poor in India, Hansen's disease now has a whole new playground. This disease has also been associated with social stigma which has led to the isolation of these patients. In the 1980s, multidrug therapy led to a rapid decline in the spread of this disease. India declared the elimination of this disease in 2005. Elimination was defined as a prevalence of <1/10,000 people. Since then, the new case detection rate in India has fallen, and the index of suspicion for this disease seems to have decreased. However, suspecting and looking for Hansen's disease and lepra reactions is still relevant in the Indian scenario. The patient presented here had skin lesions in covered areas, and a thorough skin examination was key in the diagnosis of this disease. Hansen's disease in lepra reactions has known to present with unusual symptoms. Swelling of the limbs has been described in Hansen's disease. Lepra reactions add to the variable presentations in Hansen's disease, and the suspicion of this disease is our biggest weapon against it. To believe that the disease does not exist is a luxury, we cannot yet afford.

Conclusion

A diagnosis of Hansen's disease needs a keen suspicion of the disease. Medical vigilance is needed to detect cases with unusual presentations.

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Conflicts of interest
There are no conflicts of interest.

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