

Pseudodactylitis : A unique Manifestation of Lepromatous Leprosy

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Leprosy has many unique manifestations, sometimes delaying the actual diagnosis. Arthritis in leprosy is a common rheumatologic manifestation seen in lepra reactions. Diffuse fusiform digital swelling termed as dactylitis may occur secondary to leprosy arthritis and enthesitis. These presentations are common in other rheumatologic disorders and may cause diagnostic dilemma till neurologic manifestations of leprosy are evident. We present a case of lepromatous leprosy in an Indian patient manifesting as pseudodactylitis and nodular lesions over forehead. On examination he had enlarged peripheral nerves and sensory loss over distal limbs. Slit skin smear was positive for lepra bacilli and patient was treated with WHO - MDT multibacillary regimen. This report highlights the unique manifestation of lepromatous leprosy which requires a high index of suspicion for diagnosis.

Key words : Lepromatous Leprosy, Pseudodactylitis, Leprosy Arthritis

Introduction

Leprosy is a complex disease with a mélange of clinical presentations often testing the most trained eye. Majority of cases are still reported from India and Brazil. Ever since introduction of MDT by WHO, early diagnosis and treatment has been the goal for leprosy management. We report an unusual presentation of lepromatous leprosy in an Indian patient from rural background manifesting as pseudodactylitis.

Case Report

A 55 year old male farmer presented with 1 year history of painless swelling of index finger of both hands and skin colored to slightly erythematous noduloplaque lesion vertically over forehead extending from root of nose to hairline. There was history of excision of nodules followed by recurrence. He also had a single erythematous nodule on dorsum of hand. He otherwise did not have any systemic clinical signs/ symptoms. There was family history of claw hand in mother.

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Clinical examination revealed ill defined fusiform swelling of proximal interphalangeal joint of both index fingers (Fig. 1a). There were skin colored discrete and coalesced noduloplaque lesion

measuring 5x3 cm on his forehead (Fig. 1b). He had bilateral ulnar nerve and common peroneal nerve thickening with mild sensory loss over hands and feet. Slit skin smear demonstrated

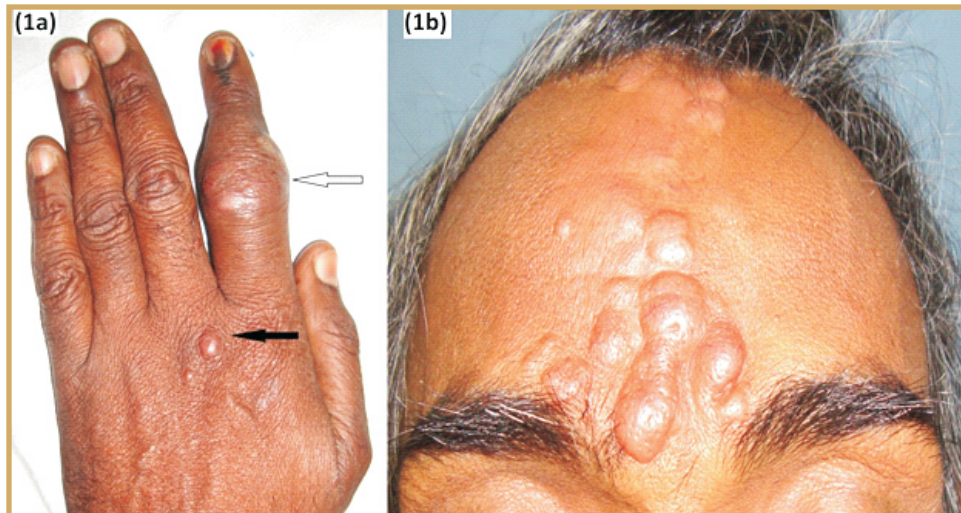


Fig 1(a) : Swelling of proximal interphalangeal joint of right index finger (empty arrow). Shiny skin colored nodular lesion over dorsum of hand (solid arrow)

Fig 1(b) : Skin coloured shiny nodulo-plaque lesion over forehead

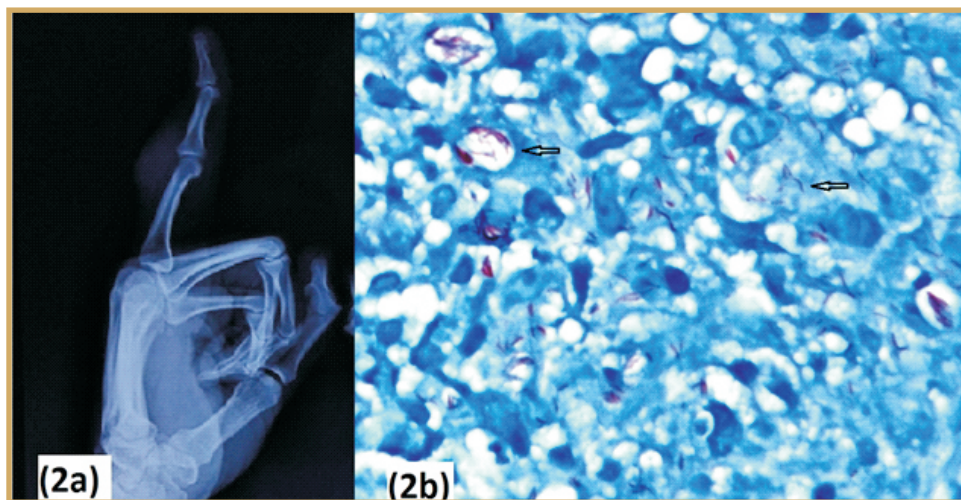


Fig 2(a) : X-Ray of hands showing soft tissue swelling only

Fig 2(b) : Fite Faraco stain (magnification 400X) shows presence of lepra bacilli (empty arrow)

bacillary index of 4+ and morphologic index of 10%. X-ray of hand shows only soft tissue involvement (Fig. 2a). Skin biopsy from skin overlying swollen joint and forehead confirmed diagnosis of nodular lepromatous leprosy (Fig. 2b). Patient was treated with WHO-MDT multibacillary regimen.

Discussion

Dactylitis is diffuse fusiform digit swelling due to soft tissue inflammation, arthritis or enthesitis. Differential diagnosis of dactylitis include infections, sarcoidosis, psoriatic arthritis, reactive arthritis, gout and bone tumours. Similar presentation of dactylitis due to spina ventosa was reported recently by (Bishnoi & Kumaran 2017). Many authors claim arthritis as third commonest manifestation of leprosy after nerve and skin involvement. Arthritis and dactylitis in leprosy generally occurs predominantly during lepra reactions (Anonymous 1981, Moulick et al 2013). Arthritis and dactylitis are seen in Type II reactions indeed but also in Type I and even without an obvious reaction. Arthritis in leprosy can be classified as (i) Charcot's joints, (ii) septic arthritis, (iii) acute polyarthritis of lepra reaction and (iv) chronic arthritis (v) tenosynovitis (Chauhan et al 2010). Many a times these patients are misdiagnosed as rheumatoid arthritis or other connective tissue disorders but later diagnosed as

Hansen's when neurological manifestations sets in (Fernandes et al 2014). These patients usually have raised acute phase reactants and normal radiological investigations. Positive ANA and RA factor can occur in around 30% leprosy reaction patients and can occasionally lead to misdiagnosis (Fernandes et al 2014).

However, in our patient the swelling of the digit was due to a lepromatous nodule, thus we termed as pseudodactylitis in absence of classical signs of true inflammation. This write-up is to exemplify yet another unusual presentation of lepromatous leprosy, thus still requiring a constant vigil even in this era where leprosy has been eliminated as a public health problem.

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