ANSWER TO PHOTO QUIZ (PAGE 208

A TENDER ERYTHEMATOUS FACIAL PLAQUE

DIAGNOSIS

Based on the clinical features and histopathological examination, we made a diagnosis of borderline tuberculoid leprosy with type 1 reaction. He received rifampicin (600 mg monthly), clofazimine (50 mg daily), dapsone (100 mg daily), and prednisolone (40 mg daily in a tapering dose) with significant improvement in 12 months.

Leprosy, or Hansen's disease, is an ancient bacterial disease caused by *Mycobacterium leprae* bacillus and continues to be a significant health problem in many parts of the world, especially in developing countries.[1] Owing to the long incubation period of *lepra* bacilli (1 to 30 years), a person may present with signs and symptoms of leprosy many years after leaving an endemic country, thus making it an imported disease into a non-endemic nation.

A case of leprosy is defined as the presence of one or more of the three cardinal signs: hypopigmented anaesthetic lesions, enlarged thickened peripheral nerves, and the presence of acid-fast bacilli. Leprosy produces a chronic infection in humans that primarily affects the peripheral nerves and skin, producing a spectrum of clinical phenotypes, based upon response of the host to the organism. According to clinical, bacteriological, histological, and immunological features, there are five types of leprosy: tuberculoid, borderline tuberculoid, mid-borderline, borderline lepromatous, and lepromatous.[2]

Type 1 reaction in leprosy occurs because of cellular hypersensitivity reaction and is characterised by acute inflammation in existing lesions. Involvement of peripheral nerves increase the likelihood of severe, rapid onset nerve damage and deformities.[3] In tuberculoid and borderline tuberculoid leprosy, a high degree of clinical suspicion is required to diagnose a case, since acid-fast bacilli within the context of leprosy are not always detected in slit skin smears and histopathological examination (with Fite-Faraco staining) of the lesions.

While encountering erythematous plaque over the face, a differential diagnosis of erysipelas (well-demarcated tender, erythematous plaques resulting from streptococcal infection of the dermis), cellulitis (ill-defined erythema, swelling, and tenderness resulting from infection of the deep dermis and subcutaneous tissue), arthropod-bite reaction (localised inflammatory reaction following an arthropod bite), tinea faciei (well-demarcated itchy, annular plaque with central clearing caused by fungal infection), and lymphocytoma cutis (type of cutaneous B-cell lymphoma) should be evaluated and ruled out. Early diagnosis and prompt treatment are of paramount importance to prevent nerve damage and resulting deformity and disability in the patient.

DISCLOSURE

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