

Images in clinical medicine



Severe type 2 lepra reaction

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Severe type 2 lepra reaction

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Image in medicine

Hansen's disease is a chronic mycobacterial infection caused by *Mycobacterium leprae*. Lepa reactions represent acute inflammatory episodes occurring during the chronic course of the disease. Type 2 lepra reaction is a Th2-mediated type III hypersensitivity reaction and is classically associated with erythema nodosum leprosum (ENL). A 22-year-old HIV-positive woman on antiretroviral therapy presented with recurrent episodes of high-grade fever and multiple painful erythematous nodules over the face, ears, trunk, and upper limbs for one year, accompanied by knee joint pain. She had a history of tubercular lymphadenitis and was receiving antitubercular therapy. The patient had also defaulted on multidrug therapy for multibacillary leprosy. On physical examination, revealed facial pallor, pedal edema, glove-and-stocking sensory loss, thickened peripheral nerves, and multiple tender

erythematous nodules over the hands, thighs, and buttocks. Laboratory investigations revealed severe anemia (hemoglobin 7 g/dL), leukopenia, a CD4 count of 90 cells/ μ L, a positive filarial antigen, and a skin-slit smear showing abundant acid-fast bacilli with a bacillary index of 6+. A skin biopsy demonstrated granulomatous inflammation with neutrophilic infiltration and fragmented acid-fast bacilli. A diagnosis of AIDS with lepromatous leprosy complicated by type-2 lepra reaction (erythema nodosum leprosum), along with tubercular lymphadenitis and filariasis, was made. The patient was treated with clofazimine, rifampicin, ofloxacin, thalidomide, diethylcarbamazine, and iron supplementation. Dapsone and zidovudine were discontinued due to hematological abnormalities. The patient showed rapid clinical improvement, with complete resolution of fever and nodules within one week and no recurrence on follow-up. The patient's general condition was stable.



Figure 1: A) shows an ulcer with necrotic base; B) erythema nodosum leprosum (type 2 lepra reaction) with ulceration; C) histopathology granulomatous inflammation with dense neutrophilic infiltrate and fragmented acid-fast bacilli