

Type-1 Leprosy Reaction Presenting as an Immune Reconstitution Inflammatory Syndrome in a Child with AIDS

Lopes, Patricia^{1,2}

1 – Associação Portuguesa Amigos de Raoul Follereau (APARF), Portugal (Non-Governmental Organization against leprosy)

2 – Hospital Dona Estefânia, Centro Hospitalar de Lisboa Central, Portugal

Background: Immune reconstitution syndrome (IRS) is an exaggerated immune response to a latent antigen during the immune recovery period usually within 3 months after highly active antiretroviral therapy (HAART) and has been infrequently reported in association with *M. leprae* infection in adults and never before in a child.

Case report: We report the case of a 9-year old female who resided in a small village in Mozambique who had been diagnosed with HIV-1 infection 6 months earlier, being the index case of the family. She had also been treated two years earlier for multibacillary leprosy, having been discharged after 12 months of multi-drug therapy and had been considered cured. At that time of the diagnosis she had a blood CD4+ lymphocyte count of 91 cells/mL (the plasma virus load could not be determined because of the great distance between the village and the laboratory). HAART (zidovudine, lamivudine, and efavirenz) was started and the CD4+ lymphocyte count gradually increased to 324 cell/mL after 3 months. After 4 months, the patient reported the appearance of asymmetric skin lesions that first developed on her buttocks and legs (which had previously been the body regions most affected by leprosy) subsequently spread to her back and face. She also reported a burning sensation in hands and feet. The neurologic examination revealed loss of sensation to light touch in some skin lesions, anesthesia of both legs from the feet to the knees, and a thickened painful left popliteal nerve. As the skin and mucous bacteriological indices were negative and the patient had formerly undergone treatment for 12 months in a row, type-1 leprosy reaction was considered as primary hypothesis and prednisolone was started (1 mg/kg) for 4 weeks and gradually tapered for 3 additional months, with full remission of the lesions and the neurological deficits.