
Brief Reports

Pediatric AIDS

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Acquired immunodeficiency syndrome (AIDS) the dreaded disease of the twentieth century has swept across the world silently and the pandemic was well under way by 1981, when AIDS was first recognized. The first pediatric case was reported in 1982 to the Centers for Disease Control in the United States of America. In India, clinical surveillance for HIV infection was initiated in October 1985, and the first patient was reported in 1986(1).

Till July 1992, 8,598 cases of HIV-1 infection have been reported in India(2). No specific mention of the incidence in children has been made. From our institute, 11 cases have been confirmed by Western blot, of which one was a case of Pediatric AIDS, which we are reporting.

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Case Report

A 12-year-old girl presented in the hospital with complaints of fever, loss of appetite and weight since 2 months, cough since 15 days and difficulty in breathing since 4 days. There was a past history of two episodes of fever and pallor for which she was given blood transfusions at the ages of 6 and 11 years in a local hospital. The source of blood was not known.

On examination, the child looked sick and emaciated and was dyspneic and febrile, but there was no localizing sign. She had sparse hair, oral thrush, maculopapular hyperpigmented lesions and a dry scaling skin.

Investigations revealed a low total leucocyte count (3,600/cu mm, 4,400/cu mm on two separate occasions), an elevated ESR (80 mm/1st h), and mild proteinuria (2+ by heat and acetic acid method): She was investigated as a case of PUO and investigations to rule out infectious etiology, autoimmune diseases, granulomatous diseases and malignancies were carried out. The positive investigations included a growth of *Klebsiella* species in the urine (8x100,000 colonies/ml) and the sputum, and a positive Rheumatoid factor. All the other investigations, including a chest X-ray were within normal limits. She was treated with antibiotics for the *Klebsiella* infection and antifungal measures for the oral thrush, to which she responded. After two weeks, she presented with a right upper lobe pneumonia, which was proven to be due to *Pseudomonas* infection. She also had bilateral otitis media

with foul smelling ear discharge, with sensorineural hearing loss, confirmed by audiometry. Due to the non specific clinical presentation and recurrent infections, there was a suspicion of immunodeficiency and hence immunoglobulin levels and ELISA for HIV was done. The investigations showed a hypergammaglobulinemia (IgG 3062 mg/dl, IgA 451 mg/dl, IgM 426 mg/dl) and the ELISA for HIV was positive, which was confirmed by Western blot. The patient was seen only once after discharge with *Staphylococcal* eyelid infection and after that there has been no follow up. She was not put on Zidovudine.

Discussion

Pediatric AIDS is defined as AIDS in children below the age of 13 years(3). The modes of transmission are vertical, exposure to contaminated blood or blood products, sexual abuse or skin piercing procedures. That blood transfusion can cause AIDS was suspected in 1983(4,5) and confirmed a year later. Screening of blood donors, paid and unpaid, has revealed 19.33% seropositivity in India in the period from October 1985 to July 1992, which is an alarmingly high figure(2). The presenting signs and symptoms of ATDS are nonspecific and a high index of suspicion is needed for early diagnosis.

Our case probably developed AIDS due to blood transfusion as other causes were ruled out by history. Transfusion associated AIDS accounts for 11% of all pediatric cases and the incubation period is about 3 years in infants and 11 years in adolescents. Our patient falls under F 2, D 2 category of the CDC classification(6).

The management of cases consists mainly of treatment of associated infections and supportive therapy. The specific therapeutic agent, Zidovudine (AZT), a reverse transcriptase inhibitor, prolongs survival and early treatment increases the interval between development of infection and symptoms(6,7). The toxicity of the drug is mainly hematologic, *i.e.*, anemia and neutropenia. Prophylaxis for *Pneumocystis carinii* pneumonia by trimethoprim (150 mg/sq m/day) and sulphamethoxazole (750 mg/sq m/day) in two divided doses on three days a week is given(6). Isoniazid prophylaxis should be given to all HIV infected patients with positive tuberculin tests.

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