Clinical aspects of pediatric AIDS cases notified in the state of Amazonas, 1991-2009

Dear Editor,

The clinical course of AIDS is faster in the child in comparison to the adult due to the child's immature immunological system.[1] Diagnosis in children is a challenge, as the clinical presentations are similar to other diseases common in childhood.[2] Early diagnosis of HIV infection, in children identified as having been exposed to the virus, as well as in those that have non-specific constitutional symptoms, demanding recurrent medical attention, will determine the prognosis of these children.[3]

We conducted a descriptive study based on pediatric AIDS data gathered by the Brazilian National Health Information System (*Sistema de Informação Nacional de Agravos de Notificação* − SINAN) of the Amazonas state, from de 1991 to 2009. The statistical analysis was performed using the MINITAB 14 software. The study was approved by the Ethics Research Committee of *Fundação de Medicina Tropical do Amazonas*/FMTAM.

The clinical symptoms of HIV infection (almost always non-specific) are used by pediatricians for early diagnosis of infected children. Children that frequently return to healthcare services with fever, diarrhea and recurrent infections, in addition to non-specific lymphadenopathy and enlarged parotid glands must have their clinical, family and epidemiological history thoroughly investigated to ensure that the HIV diagnosis is not missed, considering that mother-to-child transmission prevention was not implemented during pregnancy.

A total of 138 children with AIDS were reported in the study period, of which 58% were male, with a median age of 3 years. In only 23 cases (17%) laboratory evidence of HIV infection was obtained before 18 months of life. The other cases were diagnosed later, taking into account the clinical picture consistent with HIV infection, going against the recommendations for identification of the infected mother during pregnancy to prevent cases of pediatric AIDS.[4]

Of the total number of pediatric AIDS cases reported to SINAN-AM, less than 10 cases/year were reported from 1991 to 2002, with a sudden increase to 30 cases in 2003 followed by a decrease to a mean of 8 cases/year from 2004 to 2007; this number increased again to 32 in 2008. Only six cases of pediatric AIDS were reported in 2009, showing a local flactuation of mother-to-child transmission of HIV.

Table 1 shows that among the clinical criteria of mild severity for AIDS diagnosis in children the most frequent were the presence of lymphadenopathy ≥ 0.5 cm in more than two sites in 55% of the cases and persistent dermatitis in 46%. Other studies carried out in Brazil encountered similar results.[5-7]

Among the clinical criteria of severity (moderate/severe), recurrent or chronic diarrhea occurred in 44% of the cases, followed by recurrent bacterial infections in 43% and anemia in 41% of the cases. These were the most common manifestations of AIDS and were the main AIDS-defining diseases in the present study. Pulmonary manifestations were a common cause of hospital admission in other studies.[8,9]

The assessment of children exposed to HIV infection must be carried out, ensuring a thorough clinical and laboratory investigation, aiming at an early diagnosis and adequate treatment of possible concomitant diseases. Such practice aims at decreasing the morbidity related to fever, diarrhea and recurrent infections, in addition to non-specific lymphadenopathy and parotid enlargement. The clinical, family and epidemiological history must be thoroughly assessed so that the HIV diagnosis is not missed, since the chance of preventing mother-to-child transmission of HIV has already been missed during pregnancy.

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Table 1. Distribution of children with AIDS reported in the state of Amazonas according to the clinical criteria of mild or moderate/severe severity characteristics, 1991 to 2009

Severity	n	%
Mild severity		
Chronic parotid enlargement	9	6.5
Persistent dermatitis	63	45.7
Splenomegaly	16	11.6
Hepatomegaly	62	44.9
Moderate/severe severity		
Anemia for more than 30 days	57	41.3
Esophageal candidiasis	4	2.9
Drug-resistant oral candidiasis	25	18.1
Recurrent or chronic diarrhea	60	43.5
Encephalopathy by HIV	3	2.2
Persistent fever > 1 month	40	28.9
Herpes simplex in the bronchia, lungs or gastrointestinal tract	9	6.5
Repeated/multiple bacterial infections (pneumonia, internal organ abscesses, osteoarticular infections)	59	42.8
Lymphopenia for more than 30 days	3	2.2
Bacterial meningitis, pneumonia or sepsis (single episode)	4	2.9
Pneumonia by *P. carinii*	9	6.5
AIDS wasting syndrome	7	5.1
Brain toxoplasmosis in children older than one month	4	2.9
Pulmonary tuberculosis	8	5.8

Source: SINAN-AM, data subject to review.

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