## Retrovirology



Oral presentation Open Access

# High frequency of belated HIV diagnoses in pediatric population in Buenos Aires, Argentina

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from Fifth Dominique Dormont International Conference. Mother-to-child transmitted viral diseases: from transmission to children care Paris, France. 26–28 March 2009

Published: 22 July 2009

Retrovirology 2009, 6(Suppl I):OII doi:10.1186/1742-4690-6-SI-OII

This abstract is available from: http://www.retrovirology.com/content/6/\$1/O11

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### **Background**

The ready availability of HIV prevention, testing and treatment services has lowered HIV mother-to-child transmission (MTCT) rates to less than 2% in high-income countries. Argentina has laws that guarantee universal and free antiretroviral therapy (ART) to every HIV-infected person and makes the offering of an HIV test to every pregnant woman mandatory. In spite of this, HIV MTCT is still present. The aim of this report is to call the attention of general paediatricians of belated HIV diagnoses in children.

#### Materials and methods

From December 2004 to May 2008, HIV diagnoses in children were evaluated in 2 pediatric hospitals (referral for infectious diseases) of Buenos Aires. Those children who initiated HAART were followed-up during treatment, analyzing immunological, virological and clinical parameters to evaluate disease progression.

#### Results

During this period 101 children were HIV-diagnosed. Of them, 31 were diagnosed at age less than 12 months (median: 4 months, range: 0.5–11 months, IQR: 3–7 months), while 70 aged more than 1 year old (median: 6.4 years, range: 1–14 years, IQR: 3–10 years). Most of them had been previously assisted at primary health care centers. Around 60% of them presented moderate or severe immunological suppression and stage B or C clini-

cal signs at the time of diagnosis. Our follow-up results of 40 of these children (median follow-up time: 24.3 months, IQR: 17.7–34.7 months) indicate that delayed diagnosis of HIV-1 infection was associated with virological failure, lower CD4 percentages which did not increase during the study period despite receipt of HAART, and more advanced clinical disease which did not improve in 50% of the subjects here studied.

#### Conclusion

It is imperative to highlight that a large proportion of these children (70%) had a belated diagnosis and became the "index case" for their families. The possibility of HIV-1 infection was frequently overlooked at primary health care centers, and the diagnosis of HIV-1 infection was made at referral centers only later (once the child was referred with advanced HIV-1 clinical symptomatology and severe immunosuppression). This has been happening since the beginning of the epidemic in Argentina and apparently has not improved as much as necessary. Thus, training to increase awareness of the possibility of HIV-1 infection in children should be emphasized among general pediatricians at all primary health care sites. Even though it should be considered that the follow-up time might have not been enough to see immunological improvements, these results highlight the importance of early diagnosis and early initiation of ART.

Therefore, in a country such as Argentina, where adequate prevention resources and clinical care have been available for more than a decade, it is urgent to achieve early HIV diagnosis by generating the awareness of the possibility of HIV-1 infection in children among the pediatricians community.

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