Population of HIV-infected and uninfected mothers and newborns

- **Population of HIV-infected women and their newborns:** From 137 HIV-infected women and their 140 newborns (from whom plasma and urine were collected), obtained from an obstetrics and pediatric department of a Lisbon Hospital, were analysed at National Institute of Health (IEN), between January 2000 and May 2005.

- **Population of uninfected HIV women and their newborns:** From 140 uninfected HIV women and their 140 newborns (from whom urine was collected), obtained from an obstetrics and pediatric department of a Lisbon Hospital, were analysed at NIH between July 2000 and January 2010.

**Laboratory Methods:**

- HIV and/or Hepatitis C (HCV) plasma nested-PCR (n-rays) was performed on HIV-infected mothers and their newborn’s plasma and urine, using a commercial kit. In all cases, the results were confirmed by conventional HCV PCR (n-rays) amplification and viral load were performed on women with HC antibodies, by commercial LIPA HCV Genotyping and a nucleic acid amplification test for the quantification of HCV RNA genotype; their newborn’s plasma was also sequenced for HCV.

- Newborn’s urine was inoculated for CMV detection in both populations, using the shell-vials culture / negative 137 97.9 (96.63; 99.08) positive 3 2.1 (0.92; 3.37) total 140.

- To assess clinical and virological outcomes in children infected and not infected by HIV, born to HIV-infected mothers.

- The follow-up of children infected by HIV, CMV and/or HCV is considered normal, except for one case of HIV/CMV coinfection that has a slight development delay.

**RESULTS**

**Distribution of cases (mothers) according to geographic origin**: Table 3.

- **HIV-1 and/or HIV-2 proviral DNA nested-PCR (in-house) was performed on HIV-infected mothers and their newborn’s plasma and monitoring during pregnancy.** Newborn’s urine was inoculated for CMV detection in both populations, using the shell-vials culture / negative 137 97.9 (96.63; 99.08) positive 3 2.1 (0.92; 3.37) total 140.


**COMMENTS**

- The proportion of HIV infection in newborns was 2.1% (3 cases), consistent with that described in literature for cases where there are prophylactic attitudes and practice that led to decreased risk of HIV transmission (12, 13).

- The follow-up of children infected by HIV, CMV and/or HCV is considered normal, except for one case of HIV/CMV coinfection that has a slight development delay.


- There were no statistically significant associations between the results and the analyzed parameters.