

Detection method of HIV-2 active infection
in new-born african children

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Objectifs : The aim of this work is to assess the activity of HIV infection in mother-infant transmission and to detect efficiently the HIV infection in new-born children. Up to date it is not possible to detect directly by conventional ELISA or W. Blots the new born antibodies without to detect at the same time those of their mother. Our method allows to avoid this difficulty.

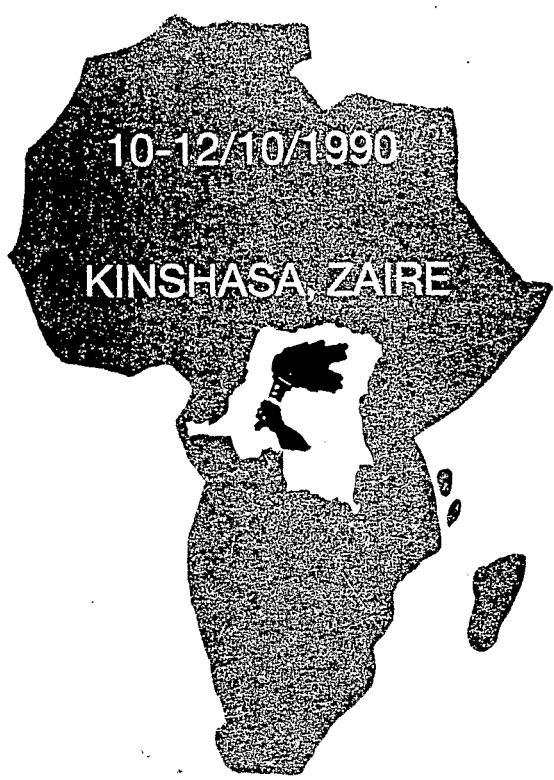
Methods : This method is based on the detection of specific anti-HIV antibodies chronically shedded by peripheral blood lymphocytes (PBL) from HIV infected patients. After isolation of these cells from mother and child with Hypaque (Pharmacia, Upsala), PBL cells were "désaturées", and conditionned during 6 days in RPMI 1640 supplemented with 20% heat inactivated FCS. Shedded antibodies by these PBL cells were assessed by WB method. Our preliminary results on HIV-2 concerns 5 mother-infant couples from a rural maternity in Côte d'Ivoire ; the new borns are 1 to 8 months aged and all are born from seropositive mother. One of the mothers is HIV 1 infected.

Results : The couple mother-infant (n° 276) exhibit HIV-1 specific bands in Western Blots carried out with the either plasma or cultures supernatants. These results allow us to affirm that the mother and child are both HIV-1 infected. In the 4 other cases of mother-infant couples, all the mothers were diagnosticated by conventional ELISA and WB as seroposive for HIV-2. We have detected by our method a specific shedding anti HIV-2 antibodies in all the mothers and only one new-born child (n° 280) exhibited an active HIV-2 infection. The restant children (n° 47,98 and 287) were negatives.

Conclusion : Running studies in African countries, using these simple method allows us to detect active single or mixed infections (HIV 1-2, CMV & Toxoplasma) in new borns or adults.

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