Prevalence of Chronic Hepatitis B Virus Infection Among High-Risk Women in Burkina Faso

Charlotte Huet¹, Abdoulaye Ouedraogo¹, François Rouet¹, Issouf Konaté¹, Isidore Traoré¹, Jean-Louis Ouedraogo¹, Antoinette Kaboré¹, Inès Millogo¹, Philippe Mayaud², Nicolas Nagot³, Philippe Van De Perre³, for the ANRS 1222 Yerelon Study Group

¹Centre Muraz, Bobo-Dioulasso, Burkina Faso; ²London School of Hygiene & Tropical Medicine, London, United Kingdom; ³Université Montpellier 1, EA 4205 «Transmission, Pathogenèse et Prévention de l’Infection par le VIH », Montpellier, France

OBJECTIVES
To estimate the prevalence of chronic HBV infection among women at high risk of HIV infection in Burkina Faso

METHODS
- Design: cross-sectional survey of high-risk women followed up in the Yerelon cohort in Bobo-Dioulasso, Burkina Faso
- Detection of (see Figure):
  - Hepatitis B core antibodies (HBcAb)
  - Hepatitis B surface antigen (HBsAg)
  - IgM-HBcAb
  - Hepatitis B envelop antigen (HBeAg) and antibodies (HBeAb)
  - Hepatitis B surface antibodies (HBsAb)

RESULTS
- 603 professional or part-time female sex workers (FSWs)
- HIV-infected women:
  - HIV1+: 228 (38%)
  - HIV2+: 7 (1%)
  - HIV1+2: 6 (1%)
- Highly Active Antiretroviral Therapy (HAART) always including lamivudine (3TC): 121 (50% of HIV+)

CHRONIC HBV INFECTION
- Prevalence of chronic HBV infection: 9.6% (95%CI, 7.4-12.2)
- Similar rates among
  - HIV-seropositive (10.0%) women and
  - HIV-uninfected (9.4%) women (p=0.83)

OCCULT HBV INFECTION?
Among women with HBcAb positive and HBsAg negative:
- 174 (45%) had undetectable HBsAb
- This was more frequent among HIV-seropositive (58%, 88/152) than among HIV uninfected (37%, 86/234) women (p<0.001)

CONCLUSIONS
- HIV-HBV coinfection very frequent in this population
- Need for monitoring the risk of hepatotoxicity and 3TC resistance with 3TC-based HAART
- Further research will quantify HBV DNA levels:
  - to estimate the prevalence of pre-C mutant viruses in HBV chronically-infected women
  - to detect occult HBV infection, more frequently observed during HIV-HBV coinfection

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