Scientific letters

Study of hidden hepatitis B in African immigrant people without data of liver disease

Estudio de hepatitis B oculta en población inmigrante africana sin datos de hepatopatía

Dear Editor:

Occult Hepatitis B (OHB) is defined as the presence of viral DNA in the liver (with or without viral DNA detectable in serum) in patients with negative HBsAg. Normally, these patients only have the AcHBc hepatic marker, although, in some cases, they may also show the AcHBs marker.1

The province of Almeria has an elevated number of immigrants from Sub-Saharan Africa, a region presenting a high prevalence of hepatitis B virus (HBV) positive markers.2 Recently published scientific research indicates the presence of OHB among immigrants with negative HBsAg and positive AcHBc and/or AcHBs.3-5 The main goal pursued by this work was to study the prevalence of this disease in African immigrant patients not infected with the human immunodeficiency virus (HIV), without any clinical or analytical data indicating hepatopathy, and with positive AcHBc as the only HBV marker.

The study is a prospective observational study, including immigrants from Sub-Saharan Africa seen during 2011 at the Tropical Medicine Unit from the Hospital del Poniente hospital (El Ejido, Almeria) that met the abovementioned criteria and agreed to participate. In each case, the DNA viral load detection was made by means of the qualitative PCR method (nested PCR, HBsAg-Pol region) with 180 IU/ml sensitivity. A total of 16 of said patients were also treated using real time PCR (RT-PCR) methods, linear range 20 U/ml (COBAS AmpliPrep/COBAS TaqMan® HBV Test, v2.0).

A total of 40 patients were included, 35 of which were male (87.5%). The average age was 33.98 years (ranging 19-68). The most frequent countries of origin were: Mali (12; 30%) and Guinea Bissau (10; 25%). Seventeen patients (42.5%) recognized hepatitis B risk factors, such as punctures (12; 30%) or high-risk sexual relations (8; 20%). Even though a normal abdominal echography does not rule out possible hepatopathy, echography was done on 16 patients for reasons not concerning this study, without signs of hepatopathy. The DNA HBV study, both using the PCR method (nested PCR, HBsAg-Pol region) applied to all 40 patients, as well as the RT-PCR method applied to 16 of them, turned out to be negative for the entirety of the subjects included in the study.

The fact that no OHB cases were detected among the subjects participating in this study contrasts with other studies also conducted on immigrant populations, where the prevalence of this disease ranges between 3 and 4.5%.5 A possible explanation accounting for these results might be the fact that that these studies included patients infected by HIV. Besides, the Chadwick et al. study also included patients with high transaminase levels.

In Spain, we have found 4 OHB studies, but the characteristics of the subjects included in those studies differ from those of the subjects participating in this study. Two of them were conducted on a group of predominantly non-immigrant patients infected with HIV, with a resulting OHB prevalence of 0.7% and 2.5%, respectively.6,7 Another study was conducted on serological samples from blood donors in Madrid, with an OHB prevalence observed every 29,482.8 The last study was conducted on paediatric patients infected with HIV, but in this case, no serological HBV DNA trace was detected in any of the participating subjects.8

There are other studies on a global level, but the characteristics of the patients are very heterogeneous, making it difficult to compare results. Raimondo et al.10 noticed an OHB prevalence of 16.3% in Italian patients with similar characteristics to those in this study, although the HBV DNA detection was done directly from hepatic tissue samples.

The importance of this study resides in the fact that Spain barely has specific studies concerning OHB among immigrants, despite the fact that many of them come from areas with a high HBV infection endemicity, such as, in our case, Sub-Saharan Africa. The presence of a high prevalence of this disease in our means could suppose, in addition to a public health problem, an overload of costs for the National System of Health.

Our study has been conceived as a preliminary approach to the disease in this population group. The main limitation observed is the small size of the study group. Other limitations are the fact that the HBV DNA detection was completed only in peripheral blood and not in liver tissue, and that the ultrasensitive PCR (RT-PCR) could only be conducted in 16 patients.

Assessing the results obtained, we could safely conclude that in our region, the OHB study conducted on African immigrant subjects with positive AcHBc as their only hepatitis B marker and without hepatopathy data, does not seem to be cost-effective, thus we discourage routine screening. However, new studies are necessary in order to confirm this statement.

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Características de los pacientes con infección por el virus de la inmunodeficiencia humana que no reciben tratamiento antirretroviral en España: estudio PICNIT

Dear Editor:

The Hospital Survey on patients with HIV/AIDS, 2010,1 that includes a representative sample of patients with HIV being followed up throughout the country, showed that 15% of those patients were not receiving antiretroviral therapy (ART) the day of the survey, because they had not started it yet or because they had interrupted it. The information on this group of patients is very limited. It is unknown if they do or do not have medical indications for treatment or the reasons why they are not receiving treatment.

With the aim of describing the sociodemographic and clinical characteristics of these patients and of evaluating the possibility to start ART, we conducted a cross-sectional survey in 12 hospital units that did follow-ups on patients with HIV in Spain in 2009-2010. The patients included were receiving follow-up attention but no ART at the moment of the last visit. We gathered sociodemographic, clinical and epidemiological information, and potential indications to start treatment, according to the current Gesida/National AIDS Plan recommendations at the moment of the survey (2010).2 The protocol was approved by the Medical Ethics Committee of the Santa Creu i Sant Pau Hospital (Barcelona), and followed the Declaration of Helsinki. The patients gave their informed consent to participate.

The sample contained 1024 patients: From a total of 1024 patients, 865 (84%) were naïve and 159 (16%) had received ART before, but had suspended it. In the group of the naïve patients, the median age was 37 years (interquartile range [RIC]; 30–43 years), 83% were men and the median of time since HIV diagnosis was 2.3 years (RIC: 1–5 years). In the transmission category, 56% of the cases were unprotected sexual intercourse between men, 27% were unprotected heterosexual intercourse and 15% was drug use injection. In the group of naïve patients, 526 (61%) did not have indication to receive ART, according to the therapeutic guidelines of the moment; 111 (13%) had indication and were going to start ART in the following visit, and 228 (26%) had at least one indication, but were not programmed to initiate ART shortly. From the 228 of patients for indication with treatment but did not expect to start, the most frequent reasons of indication to start ART was the HIV/hepatitis C virus (HCV) co-infection, 48% of the cases; elevated viral load (>100,000 copies/mL), 24% of the cases, and CD4 counts inferior to established limit at that moment (350 cells/μL), 18% of the cases. Of these 228 patients who had indication but were not programmed to begin treatment, in 199 (87%) of the cases the doctor did not consider the indication of treatment necessary, 21 (9%) of the cases added personal reasons and 8 patients (3%) were still in the phase of initial evaluation and deciding on the following steps. Of those 228 patients, 168 had only one indication for treatment; 47 patients had 2 indications and the last 13 had 3–5 indications of treatment (8 did not initiate by medical decision, 4 for personal reasons and 1 for other reasons).

Indication to start ART in all HIV/HCV co-infected patients, regardless of their CD4 level, is based on the evidence that ART reduces progression to cirrhosis, fibrosis and death in the same levels as it does in HCV mono-infected patients. For this reason, it has been stated that early initiation of ART is the best way to reduce death caused by hepatic affection of the population, even more than is it in the treatment for HCV.3 On the other hand, there is countless evidence that late initiation of ART with low CD4 lymphocyte counts increases the risk of progression to AIDS and death,4,5 and that only keeping the level of that indicator high during prolonged periods will it be possible to bring life expectancy of HIV patients near to that of the general population.6

In conclusion, almost one quarter of the patients being followed up, and who were not receiving ART, could benefit from this treatment depending on their clinical characteristics. Even though in some cases it is the patient himself who prefers not to receive medication, in most of the cases it is the doctor who considers that they do not have the indication to receive it yet.

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