

Decision to treat chronic hepatitis B in France in 2008-2009

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Background

- France is a low endemic European country for chronic hepatitis B virus (HBV) infection with an HBsAg prevalence estimates of 0.65% in the general population.
- Annual mortality related to HBV is estimated to 2.2/100 000 inhabitants.
- As part of the national hepatitis B control program, a surveillance network was set up in 2008 including hepatology reference centers and laboratories of university hospitals throughout France.

Objectives

To describe the epidemiologic, clinical and virological characteristics of patients with chronic hepatitis B at first referral in the hepatology reference centers.

Methods

- Chronic hepatitis B is defined as persistent HBsAg \geq six months.
- Data collected: country of birth, ALT and HBV DNA levels, co-morbidities, viral co-infections, antiviral therapy initiation.
- Excessive alcohol consumption is defined as >210 g/week of ethanol for women and >280 g/week for men.
- Liver fibrosis (Metavir scoring) was assessed either by biopsy and/or non-invasive methods (serum markers, transient elastography).
- For the analysis, moderate to severe liver fibrosis was defined using:
 - scores \geq F2 at biopsy and if not available;
 - scores \geq F2 at elastography or serum markers if performed solely;
 - or scores \geq F2 at elastography and serum markers when both methods matched.
- Indications of treatment are analysed according to EASL guidelines:
 - "Patients with HBV DNA levels >2000 IU/ml and/or the ALT levels $>$ upper limit of normal for the laboratory, and liver biopsy (or non-invasive markers when validated in HBV-infected patients) shows moderate to severe active necroinflammation and/or fibrosis using a standardised scoring system should be considered for treatment".

Results

- 1 359 treatment naïve HBsAg-positive patients included in 33 wards.
- 59% male.
- 79% born in moderate to high endemic country for HBV (figure 1).
- Median age: 36 years (interquartile range: 17 years).
- 633 (47%) patients with ALT $>$ upper limit of normal or HBVDNA >2000 IU/mL.
- Characteristics of patients are presented in tables 1-3.

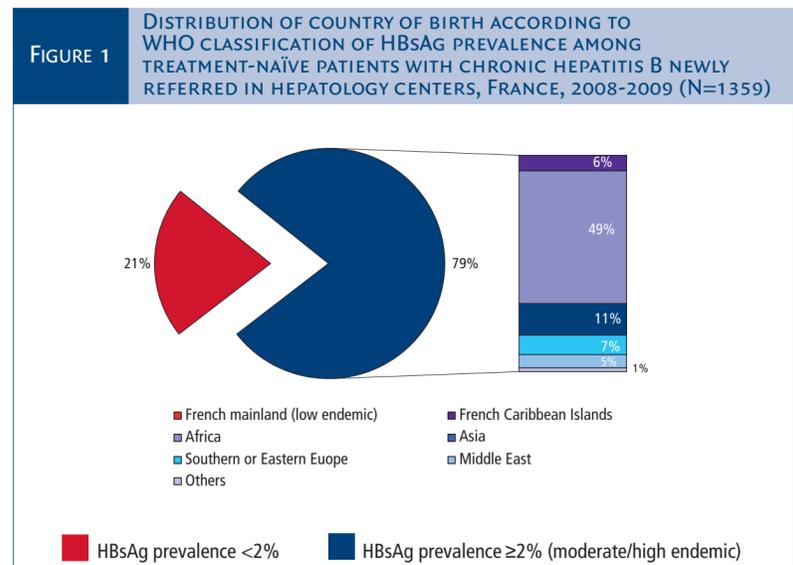


TABLE 1 BIOLOGICAL CHARACTERISTICS OF TREATMENT-NAÏVE PATIENTS WITH CHRONIC HEPATITIS B AT FIRST REFERRAL IN HEPATOLOGY CENTERS, FRANCE, 2008-2009

	n	%
N=1359		
ALT levels		
<ULN	792	58.3
$>$ ULN - <2 xULN	207	15.2
≥ 2 xULN	123	9.0
not available	237	17.4
HBV DNA levels		
≤ 2000 IU/mL	566	41.6
>2000 IU/mL	495	36.4
not available	298	22.0
HBe Ag		
positive	140	10.3
negative	1014	74.6
not available	205	15.1

TABLE 2 CO-MORBIDITIES AND VIRAL CO-INFECTIONS AMONG TREATMENT-NAÏVE PATIENTS WITH CHRONIC HEPATITIS B AT FIRST REFERRAL IN HEPATOLOGY CENTERS, FRANCE, 2008-2009

	n	%
N=1359		
Excessive alcohol consumption^a		
no	1040	76.5
yes	95	7.0
not available	224	16.5
BMI		
<25 kg/m ²	511	37.6
≥ 25 kg/m ²	386	28.4
not available	462	34.0
Anti-HIV		
positive	19	1.4
negative	937	69.0
not available	403	29.6
Anti-HCV		
positive	37	2.7
negative	1029	75.7
not available	293	21.6
Anti-HDV		
positive	33	2.4
negative	911	67.0
not available	415	30.6

^a >210 g/week of ethanol for women and >280 g/week for men; BMI, body mass index; overweight /obesity when BMI ≥ 25 kg/m².

DECISION TO TREAT ACCORDING TO EASL GUIDELINES

- 429 patients with increased ALT ($>$ upper limit of normal) or HBV DNA >2000 IU/mL and an available assessment of liver fibrosis.
- 157 (36.6%) patients with liver fibrosis \geq F2 including:
 - 58 patients with liver fibrosis F4;
 - 93 patients treated (out of 114 with available information on treatment).

TABLE 3 INDEPENDENT FACTORS ASSOCIATED WITH DECISION TO TREAT CHRONIC HEPATITIS B IN HEPATOLOGY CENTERS, FRANCE, 2008-2009

	aOR	CI95%
Liver fibrosis \geq F2	31.7	9.8-103.0
ALT level $>$ ULN	7.4	3.2-17.1
HBV DNA >2000 IU/ml	3.8	1.4-10.1
Age >36 years	3.5	1.8- 6.9

aOR, adjusted Odds Ratio; CI, confidence interval; ULN, upper limit of normal; Other factors associated with decision to treat in univariate analysis (sex, country of birth, HBeAg status, history of excessive alcohol consumption) did not remain significant in the multivariate analysis; significant interactions are taken into account.

Conclusion

- In France, most of the patients with chronic hepatitis B were originating from a moderate/high endemic country for HBV and were HBeAg negative.
- Decision to treat chronic hepatitis B in 2008-2009 is taken in respect of the EASL guidelines.

References

- Meffre C *et al.* J Med Virol 2010;82:546-55.
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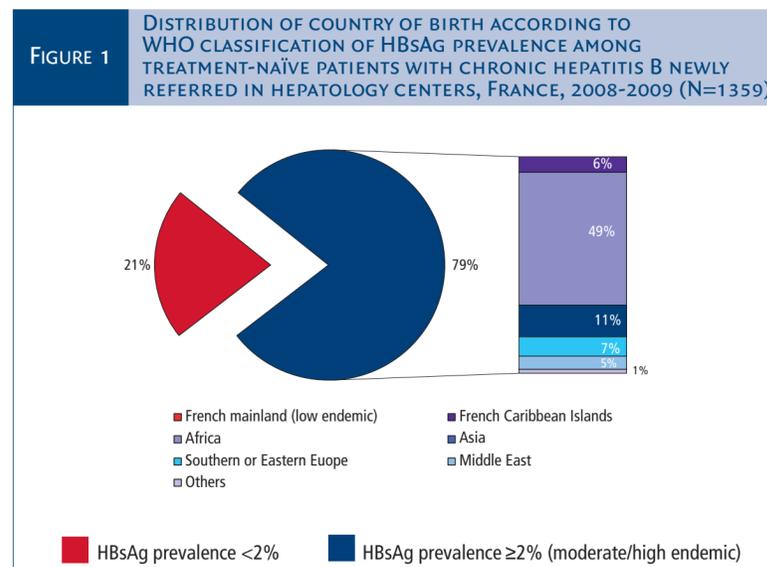


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