EASL The Home of Hepatology

THE INTERNATIONAL LIVER CONGRESS™ 2017

19-23 APRIL. AMSTERDAM. THE NETHERLANDS

The use of prophylactic strategies using hepatitis B immunoglobulin for hepatitis B recurrence after liver transplantation in routine clinical practice in Spain. Results of a Delphi Panel

Prieto M[1], Lens S[2], Buti M[3], Pascasio JM[4], Fernández I[5], Mareque M[6], Torres C[6], Casado MA[6], Study Group on the Use of HBIg after liver transplantation in Spain[7]

[1] Hospital Universitario La Fe, Valencia, Spain; [2] Hospital Clínic, Barcelona, Spain; [3] Hospital Universitari Vall d´Hebrón, Barcelona, Spain; [4] Hospital Universitario Virgen del Rocío, Sevilla, Spain; [5] Hospital 12 de Octubre, Madrid, Spain; [6] Pharmacoeconomics & Outcomes Research Iberia (PORIB), Madrid, Spain; [7] Liver Transplant Units in Spain

INTRODUCTION

- The use of human anti-hepatitis B immunoglobulin (HBIg) associated with nucleos(t)ide analogues (NA) has reduced the rate of HBV recurrence after liver transplant (post-LT)[1-4].

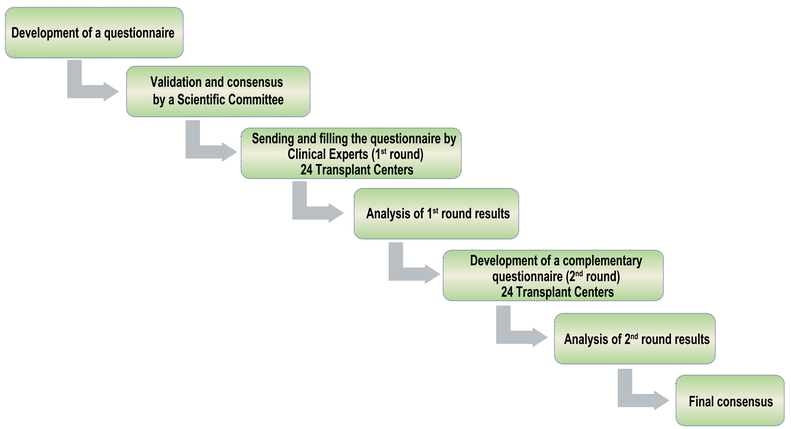
AIM

- The aim of this study was to evaluate the use of HBIg for prevention of HBV recurrence post-LT in routine clinical practice in Spain, using a specific questionnaire (1st and 2nd round).

METHODS

- A descriptive study based on an Expert Panel using a Delphi method was conducted.
- A questionnaire was developed and validated by a Scientific Committee of 5 hepatologists.
- This questionnaire was sent to Clinical Experts of the 24 Liver Transplant Centers in Spain (1st round).
- Once the results of the 1st round was analysed, a 2nd questionnarie was sent to the same experts (2nd round).

Figure 1. Delphi method



- The questionnaire included 8 sections (S-1 to S-8) with 11 questions (see results).
- Results of the 2nd round questionnaire were presented.

RESULTS

- All centers (100%) completed the questionnaire (1st and 2nd round).
- The results for each of the sections were as follows:

S-1. Use of HBIg in post-LT (monotherapy/combination therapy).
- In post-LT and in the induction phase, all centers confirmed the use of HBIg and its use in combination therapy.

S-2. Post-LT Therapeutic regimens.
- Table 1 shows the prophylaxis regimens in post-LT. In the maintenance phase, the most common treatment was HBIg plus Tenofovir (TDF) (23 centers; 96%) or plus Entecavir (ETV) (22 centers; 92%).

S-3. Continuity of use of NA used in pre-LT.
- 100% of the centers continue with same NA used in the pre-LT.

S-4. Post-LT patient follow-up (diagnostic techniques and periodicity).
- In post-LT follow-up, the most common periodicity between medical check-ups varies between 1-3 months for the 1st year (75%) and between 3-6 months for the 2nd year (96%).
- The most used diagnostic techniques (both for the 1st and the 2nd year) are viral serology (95%-96%) and detectable HBV-DNA (86%-88%).

S-5. Criteria for defining HBV recurrence.
- The most common criteria for the definition of recurrence was serological or virological criteria (49%) or both (Figure 2).

S-6. Recurrence therapeutic schemes.
- In case of HBV recurrence post-LT, the most common treatment would be TDF (21 centers; 91%) or ETV (16 centers; 70%). Table 2 shows the suggested therapeutic schemes in case of HBV recurrence post-LT.

S-7. Patient follow-up of HBV recurrence post-LT.
- For recurrence follow-up, both periodicity and diagnostic techniques coincide with those described in post-LT follow-up.

S-8. Vaccination.
- 79% and 54% of the centers perform pre-LT and post-LT vaccination, respectively.

Figure 2. Criteria for defining HBV recurrence

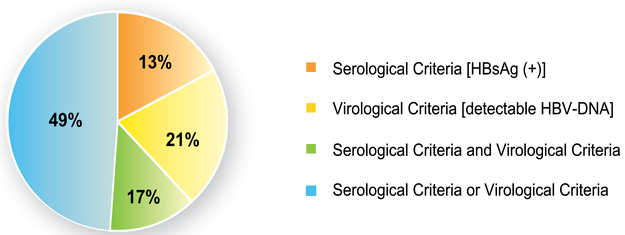


Table 1. Prophylaxis regimens in post-LT

Prophylaxis with		Period	Posology		Duration		Route of administration	
HBIg+NA	HBIg	Anhepatic (Day 0)	≤1,000 IU >1,000 to 5,000 IU **>5,000 to 10,000 IU**	12,5% 12,5% **75%**			**Intravenous** Intramuscular	**83%** 17%
		1st week post-LT (Day 1 - Day 7)	≤1,000 IU/daily **>1,000 to 5,000 IU/daily** >5,000 to 10,000 IU/daily	25% **67%** 8%			**Intravenous** Intramuscular	**79%** 21%
		1st month post-LT (Only 2-4 weeks)	≤1,000 IU/weekly **>1,000 to 5,000 IU/weekly** >5,000 to 10,000 IU/weekly	38% **58%** 4%			**Intravenous** Intramuscular Subcutaneous	**54%** 33% 13%
		Maintenance*	≤1,000 IU/monthly **>1,000 to 5,000 IU/monthly** >5,000 to 10,000 IU/monthly **Others:** 1,000 IU/1-2 months 1,000 IU/3-6 months 2,000 IU/1-2 months	9% **79%** 0% 4% 4% 4%	1 month≥ - ≤6 months 6 months≥ - ≤12 months 12 months≥ - ≤18 months 18 months≥ - ≤24 months ≥24 months **Indefinite**	17% 13% 9% 9% 9% **43%**	**Intramuscular** Subcutaneous	**74%** 26%
	NA	LAM** (11 centers; 46%)						
		ETV** (22 centers; 92%)	**0.5 mg/daily** 1 mg/daily	**96%** 4%				
		TDF** (23 centers; 96%)						

*One center does not perform maintenance with HBIg. Only treated patients until 1st month post-LT.
**% of use (average value): LAM, 58%; ETV, 33%; TDF, 45%.
The posologies were grouped by time period due to the high variability.
In bold the most frequent regimen.

Table 2. Suggested therapeutic schemes in case of HBV recurrence post-LT

Treatment of HBV recurrence		Posology	Duration		Route of administration	
Monotherapy						
TDF* (21 centers; 91%)			**Indefinite**	**100%**	Oral	
ETV* (16 centers; 70%)			**Indefinite**	**100%**	Oral	
Combination therapy						
TDF+ETV* (14 centers; 61%)			**Indefinite** Loss of HBV DNA	**93%** 7%	Oral	
Other* (2 centers; 9%)	**HBIg**	**500 - 1,000 IU/monthly**	**Indefinite** **4 months**	**50%** **50%**	**Intravenous** Intramuscular Subcutaneous	**50%** 25% 25%
	NA ETV o TDF		**Indefinite**	**100%**	Oral	

*% of use (average value): TDF, 55%; ETV, 30%; TDF+ETV, 36%; HBIg+NA, 10%.
In bold the most frequent regimen.

CONCLUSIONS

- Despite the great variability of the results, HBIg combined with NA is the standard of care during the first month in the prevention of HBV recurrence.
- Almost half of the centers discontinue HBIg treatment between 2 to 24 months.

REFERENCES

1. Cholongitas E, et al. Review of the pharmacological management of hepatitis B viral infection before and after liver transplantation. World J Gastroenterol. 2013;19(48):9189-97.
2. John S, et al. Prophylaxis of hepatitis B infection in solid organ transplant recipients. Therap Adv Gastroenterol. 2013;6(4): 309-19.
3. Roche B., et al. Rational Basis for Optimizing Short and Long-term Hepatitis B Virus Prophylaxis Post Liver Transplantation: Role of Hepatitis B Immune Globulin. Transplantation. 2015;99(7): 1321-34.
4. Prieto.M et al. Estrategias para evitar la recidiva viral B después del trasplante hepático. Gastroenterol Hepatol. 2014;37(Supl 2):30-42.

Póster Nº 441

Study funded by Gilead Sciences

Designed by [porib] Pharmacoeconomics & outcomes research Iberia