P-115 HLA-DRB1*03 /HLA-DRB1*12 ARE ASSOCIATED WITH AUTOIMMUNE HEPATITIS IN A HISPANIC ADULT POPULATION

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Conflict of interest: No

Introduction and Objectives: Genetic predisposition for autoimmune hepatitis (AIH) has been associated with the presence of specific HLA-DRB1 alleles and/or motifs which vary depending on the population in which they are studied. Besides different genetic and environmental factors influencing the development of AIH in different populations, low and medium resolution typing methods might also impair the identification of critical variants in HLA-DRB1 associated with AIH.

The aim of this study was to identify the principal genetic determinants in HLA-DRB1 in an adult population that act as risk factors for the development of AIH.

Patients / Materials and Methods: 39 patients and 195 controls were typed for HLA-DR by sequence-based typing, and the allele groups associated with the disease in the population of study were identified.

Using sequence data, previously reported epitopes with proposed association with the disease were identified in the population of study.

Results and Discussion: DRB1*03 and DRB1*12 allele frequencies were significantly higher in patients than in controls. Allele DRB1*04 had a higher frequency in patients than controls although this difference was not significant. Moreover, the frequency of allele DRB1*08 was significantly lower in patients than in controls. The only reported motifs that showed an association with AIH in studied patients was LLEQKR and Lysine 71.

Conclusions: The main HLA-DRB1 alleles associated with type 1 AIH in the population of study are DRB1*03 and DRB1*12, and epitopes LLEQKR 67-72 and Lysine 71 were the only reported epitopes associated with the disease. The differences in alleles and epitopes observed in studied patients, especially when compared to studies from other Hispanics with similar populations likely reflect differences in genetic composition, exposure to distinct pathogens and antigens that can trigger autoimmunity and/or the use of more precise HLA typing methods in this study.

Antigen	AIH Patients	Controls	Statistical analysis Patients *vs* Controls
	Frequency (%)	Frequency (%)	P-value
DRB1*01	3,8	9,0	0,1305
DRB1*03	17,9	5,9	0,0003
DRB1*04	32,1	25,4	0,2238
DRB1*07	7,7	9,2	0,6645
DRB1*08	2,6	12,3	0,0111
DRB1*09	1,3	1,3	1,0000
DRB1*10	2,6	1,3	0,3950
DRB1*11	3,8	6,4	0,3839
DRB1*12	5,1	0,5	0,0010
DRB1*13	6,4	10,8	0,2428
DRB1*14	6,4	5,4	0,7186
DRB1*15	9,0	10,0	0,7814
DRB1*16	1,3	2,6	0,4955

(*continued*)

Distribution of HLA-DRB1 alleles in patients with type I Autoimmune Hepatitis and controls

https://doi.org/10.1016/j.aohep.2024.101729

P-116 PREDICTION OF CIRRHOSIS THROUGH THE VELOCITY TIME INTEGRAL OF PORTAL VEIN TRACE

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Conflict of interest: No

Introduction and Objectives: Doppler ultrasound of the portal vein (PV) is a routine study in the diagnosis and follow-up of cirrhotic patients. Identifying non-invasive parameters for the diagnosis and monitoring of this population is crucial. The assessment of the velocity time integral (VTI) is a widely used parameter in doppler ultrasound (cardiology) but has been less explored in the context of portal doppler.

Patients / Materials and Methods: Portal doppler ultrasound was performed on a cohort of patients with cirrhosis and controls. Several hemodynamics variables of the PV and hepatic artery (HA) were collected (Table 1). Logistic regression was used to determine the predictive capacity of these variables. A ROC curve was generated, and the area under the curve (AUC) was calculated. Sensitivity, specificity, NPV, PPV, and likelihood ratios (LLR+ and LLR-) were also evaluated.

Results and Discussion: Fifty patients were evaluated (36 with cirrhosis and 14 controls). Differences between variables of cirrhosis and control groups are shown in Table 1. The optimal cutoff point for VTI Porta x min was 1517.3 cm/min, with a sensitivity of 88.89%, specificity of 83.33%, NPV of 83.33%, PPV of 88.89%, LLR+ of 5.33, and LLR- of 0.13. The area under the ROC curve was 0.91.

Conclusions: VTI Porta x min is a significant predictor of hepatic cirrhosis. This measure can be a valuable tool in clinical practice to identify patients with a high probability of cirrhosis and may be part of a multiparametric liver evaluation.

Tabla 1

Variable	Cirrosis	Controles	p
VTI portal x minute (cm x min)	1291.3 (976.8 - 1558.9)	2514.3 (2152.5 - 2670.6)	<0.001*
Total portal volume	1421.9 (1100.7 - 1874.2)	1688.3 (1399.8 - 2881.13)	0.098
VTI HA x beat (cm x beat)	52 (41.4- 65.9)	42 (33- 56.1)	0.160
VTI HA x min (cm x min)	3381.3 (2642.1 - 4087.2)	3265(2327- 4012.9)	0.552
Total HA volume	791.2(282.6- 1189)	257.2 (151.4 - 371.5)	0.001*
Total liver flow	2314.16 (1603.5 - 3115.8)	1968.09 (1650.6 - 3236.1)	0.770
% Portal volume	0.61 (0.5 - 0.8)	0.88 (0.8 - 0.9)	<0.001*
% Arterial volume	0.39 (0.1 - 0.4)	0.12 (0.08-0.1)	<0.001*

Mann-Whitney test, p value < 0,05 statistical significance. HA: Hepatic Artery. VTI: Velocity Integral Time.