Predictive Factors of Advanced Fibrosis on Liver Biopsy in Hepatitis C in Vietnam

Ngo Van Huy[1], José M Bengoa[2,3], Ho Hoang Thao Quyen[1], Pierre Jean Malè[2,3], Emiliano Giostra[3]
1. Bênh Viên FV, D-7, Ho Chi Minh City, Vietnam 2. Geneva Foundation for Medical Education and Research
3. Service de Gastroentérologie et Hépatologie, Hôpitaux Universitaires de Genève

BACKGROUND

Very few published studies are available on hepatitis C in Vietnam, and results of liver biopsy are lacking. Advanced stages of fibrosis on liver biopsy are considered as a requisite for starting therapy. In this high prevalence area we aimed to identify clinical and epidemiological factors predictive of advanced fibrosis on liver biopsy.

Methods: a series of 100 consecutive liver biopsies in HCV patients attending an outpatient clinic was correlated with epidemiology, laboratory, histology and APRI score (AST-to-platelet index).

Table 1:patient characteristics

Gender	M/F %	50/50
Age	years (sd)	47.5 (10.4)
Weight	kg (sd)	51.2 (27.1)
BMI	kg/m2 (sd)	22.9 (3.1)
ALAT	IU/l* (sd)	75.0 (76.0)
ASAT	IU/l* (sd)	59.9 (54.1)
GGT	IU/l* (sd)	84.2 (125.6)
HCV-RNA	IU/m	13.9 .10^5 (16.9 .10^5)

Table 2: genotypes and Metavir

Genotypes		Metavir score	
1	66%	F0	51%
2	7%	F1	18%
3	1%	F2	16%
6	23%	F3	5%
no	3%	F4	10%

Table 3: risk factors for hepatitis C

	yes	no	not known
Invasive procedure	48%	47%	5%
Blood transfusion	25%	62%	13%
Acupuncture	18%	64%	23%
iv drug injection	2%	85%	13%
HCV partner	2%	57%	41%

Table 4: analysis of predictive factors for advanced fibrosis

Continuous variable	F0/F1	F2/F3/F4	p value
Age y (sd)	47.5 (11.0)	51.3 (9.5)	ns
BMI kg/m2 (sd)	23.3 (3.2)	23.1(3.8)	ns
ALAT IU/l (sd)	66.6 (72.6)	142.1(119.2)	0.012
ASAT IU/l (sd)	47.6 (40.1)	117.7(84.6)	<0.01
GGT IU/l (sd)	61.6 (115.8)	110.8 (79.5)	0.03
APRI (sd)	0.57 (0.60)	1.69 (1.23)	<0.01
HCV RNA (IU/ml)	10.6 10^5	15.3 10^5	ns

Table 5: analysis of predictive risk factors for advanced fibrosis

Categorical variable	F0/F1	F2/F3/F4	p value
Sex male/female	32/38	19/12	ns
Genotype 1/6	49/18	18/6	0.013
Invasive proc yes/no	34/31	14/17	ns
Transfusion yes/no	20/42	5/21	ns
Alcohol yes/no	9/61	8/23	ns
Acupuncture yes/no	12/33	1/17	ns

Multivariate analysis: only APRI score and ALT were significantly predictors of advanced fibrosis

Conclusions

HCV genotype 1 and genotype 6 were the most frequent.
On liver biopsy benign histological forms were predominant, two times more frequent than advanced stages of fibrosis.
APRI score may be used as a biomarker for screening of advanced fibrosis in this setting.
Neither age, sex, BMI, nor viral load were predictive of advanced fibrosis in hepatitis C in the south of Vietnam.

BỆNH VIỆN FV
Niềm tin vào Y đức

HUG
Hôpitaux Universitaires de Genève