



Figure 1: A. Kaplan Meier survival analysis of patients with HCC diagnosis incidentally (blue line) vs under surveillance (red line) (p=0.18). B. Epidemiological variables at diagnosis.

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### P- 24 DISTRIBUTION OF HEPATITIS C GENOTYPES IN THE ARGENTINE POPULATION IN THE LAST TEN YEARS

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**Introduction and Objectives:** Hepatitis C virus (HCV) consists of 7 genotypes and multiple subtypes. With the introduction of pan-genotypic direct-acting antivirals (DAAs), the utility of genotype as a prognostic factor for treatment tends to be less relevant. However, it is useful for those patients who require a second DAAs regimen. In Argentina, there are few reports on the prevalence of HCV genotypes, which indicate a varied and changing distribution in different cities. This study aimed to determine the frequency of HCV genotypes in different cities of Argentina in the last ten years.

**Materials and Methods:** Retrospective cross-sectional study of HCV genotypes performed by sequencing the 5' untranslated region of the viral genome in 1.178 samples assayed in the periods 2013-2017 and 2018-2023, taken in clinical analysis laboratories in different cities of Argentina: Rosario (RO, n=465), Villa María (VM, n=173), Mar del Plata (MDQ, N=111), Córdoba (COR, n=384) and Ramos Mejía (RM, n=45). Frequencies between periods were compared using Fisher's test.

**Results:** The frequencies of each genotype are presented in the Table. There is a variation among cities that is maintained in both periods, with the exception of MDQ. An increase in the frequency of G3 is observed in the 2018-2023 period, although it was not statistically significant.

**Conclusions:** The present study updates the knowledge on the distribution of HCV genotypes in Argentina, showing a variation among cities. The frequency of G3a, at present the most difficult genotype to treat, could be rising. Surveillance studies with a larger number of samples would be necessary to confirm this hypothesis. VM frequencies confirm the existence of foci with high prevalence of certain genotypes in some cities, as previously reported. It is necessary to continue monitoring the circulation of HCV genotypes even after DAAs usage and their consequent impact on public health.

Genotype/City	2013-2017					2018-2023				
	RO	VM	COR	MDQ	RM	RO	VM	COR	MDQ	RM
1a	16,1 (53)	10,0 (8)	14,5 (8)	42,2 (19)	23,5 (4)	14,0 (19)	7,5 (7)	17,6 (58)	28,8 (19)	21,4 (6)
1b	21,9 (72)	2,5 (2)	38,2 (21)	8,9 (4)	17,65 (3)	23,5 (32)	1,1 (1)	27,1 (89)	24,2 (16)	21,4 (6)
2	36,2 (120)	87,5 (70)	36,4 (20)	20,0 (9)	23,5 (4)	33,1 (45)	90,3 (84)	42,5 (140)	12,1 (8)	25,0 (7)
3a	21,9 (72)	-	7,3 (4)	26,7 (12)	17,65 (3)	27,2 (37)	1,1 (1)	10,6 (35)	31,8 (21)	25,0 (7)
4	3,6 (12)	-	3,6 (2)	2,2 (1)	17,65 (3)	2,2 (3)	-	2,1 (7)	3,0 (2)	3,6 (1)
5	-	-	-	-	-	-	-	-	-	3,6 (1)
n Total	329	80	55	45	17	136	93	329	66	28

Table: Distribution of HCV genotypes.

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### P- 25 METABOLIC, HISTOLOGICAL AND INFLAMMATORY BENEFITS IN A MURINE MODEL OF ALCOHOLIC STEATOHEPATITIS USING METHYL-GROUP DONOR SUPPLEMENTATION

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**Introduction and Objectives:** Chronic alcohol consumption causes alcohol-related liver disease (ARLD) ranging from fatty liver, alcoholic hepatitis to cirrhosis, and HCH. Currently, the main treatment for alcohol-related liver disease is abstinence; then it becomes necessary to evaluate therapeutic alternatives. Micronutrients known as methyl group donors have the potential to influence the development and progression of several diseases, including ARLD. This study aimed to evaluate the effect of chronic alcohol consumption coupled with methyl-group donor supplementation on metabolic and histologic features and gene expression of proinflammatory cytokines in a murine model of ARLD.

**Materials and Methods:** 24 male C57BL/6J mice with an initial weight of 20-25g were divided into groups with a conventional diet (ND n=8); or alcohol-related liver-injury was induced with ad libitum consumption of a 20% ethanol-aqueous drink and a 45%-fat diet (OH n=8) for 18 weeks; or with ethanol drink and the diet high in fat for 10 weeks, plus 8 additional weeks of this diet plus methyl group donor orogastric supplementation -zinc sulfate, methionine, vitamin B12, folic acid, betaine and choline- (OH +METMIX n=8). Serum biochemical studies and hepatic and adipose histological analyzes were performed. In the liver, mRNA levels of IL6 and TNF $\alpha$  were quantified.

**Results:** Supplemented animals showed a decrease in body weight, epididymal fat and serum levels of cholesterol, HDL and LDL (p<0.05). Meanwhile, AST, ALT, TG and VLDL, as well as IL-6 and TNF-mRNA and the hormones insulin, leptin, glucagon and resistin showed a tendency to decrease in the METMIX group.

**Conclusions:** Treatment with methyl-group donors improves body weight, body composition, cholesterol, LDL and HDL concentrations exerting beneficial and protective effects even with continuous consumption of an ethanol-aqueous drink.

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