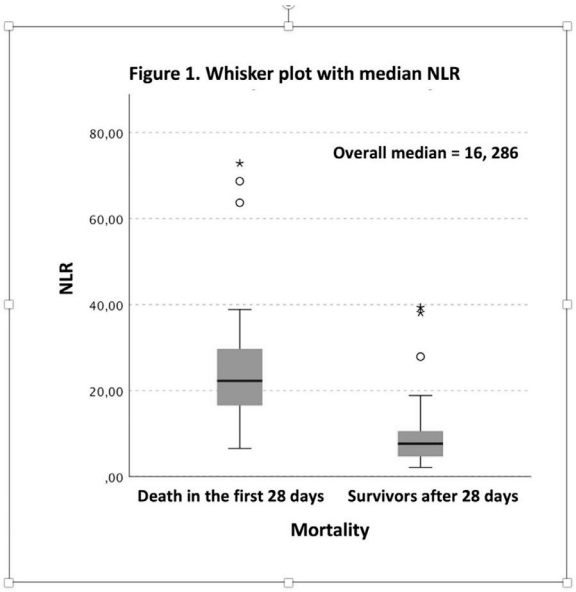
**Table 1**
Comparison of clinical data and severity scales between surviving and non-surviving subjects at 28 days.

| Variable | Death in the first 28 days (n=33) | Survivors after 28 days (n=25) | *p* |
|---|---|---|---|
| Age | 46.0 ± 8.7 | 41.8 ± 10.1 | 0.094 |
| Leukocytes | 21.6 (15.0, 29.6) | 9.6 (7.7, 13.2) | < **0.001** |
| Platelets | 168.9 ± 97.1 | 138.8 ± 91.9 | 0.234 |
| PT | 23.0 (19.1, 28.6) | 22.2 (17.9, 25.7) | 0.236 |
| BT | 24.4 ± 9.3 | 15.0 ± 10.1 | < **0.001** |
| INR | 2.00 (1.79, 2.70) | 1.94 (1.50, 2.27) | 0.118 |
| Cr | 2.16 (1.30, 3.19) | 1.30 (0.82, 2.09) | **0.007** |
| NLR | 23.0 (18.0, 34.0) | 8.0 (5.0, 11.0) | < **0.001** |
| CLIF SCORE | 56.18 ± 6.28 | 46.88 ± 6.35 | < **0.001** |
| MADDREY | 71.3 (55.3, 99.1) | 65.6 (33.4, 74.5) | 0.059 |
| MELD | 35.7 ± 12.5 | 25.0 ± 8.6 | < **0.001** |
| MELD NA | 39.2 ± 15.8 | 29.7 ± 13.8 | **0.021** |

BT, Total bilirubin; CLIF SCORE, Chronic Liver Failure score; Cr, Creatinine; INR, International Normalized Ratio; MADDREY, Maddrey's discriminant function; MELD, Model for End-Stage Liver Disease; MELD NA, MELD sodium; NLR, Neutrophil-lymphocyte ratio; PT, Prothrombin Time.

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## Importance of the profile of inflammatory and anti-inflammatory cytokines in patients with Hepatitis C according to degrees of fibrosis.

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**Introduction and Objectives:** The cure for chronic Hepatitis C (HCV) is a milestone for humanity, however, patients could still progress toward hepatocellular carcinoma even after receiving direct-acting antiviral treatment [1]. Therefore, determining the inflammatory (IFN-$\gamma$, TNF-$\alpha$), and anti-inflammatory (IL-10- IL-1RA) profiles in patients with different degree of liver fibrosis are the important aim in researching of new biomarkers.

**Materials and Methods:** Prospective, cross-sectional and multicenter study; approved through the ethics committee of the UNAM, and the Hospital General de Mexico, patients with chronic Hepatitis C (CHC), and healthy subjects (control group) were included. A personalized survey of chronic and recent pathologies, as well as alcohol consumption, was performed in all the subjects. Biochemical and hematological laboratory test were performed, including Fibroscan and/or Fibrotest to determinate the degree of fibrosis. In addition, the cytokine profile (IFN-$\gamma$, TNF-$\alpha$, IL-10 and IL-1RA) was quantified in the serum by multiple suspension array. The data was analyzed by Kruskal-Wallis, Mann-Whitney U and ANOVA statistical tests by SPSS v.22 software, considering $p > 0.05$

**Results:** A total of 180 CT subjects were included; whereas 90 patients with CHC with different grades of fibrosis: F0=20, F1=15, F2=15, F3=16 and F4=24, were enrolled. As has been studied, Hepatitis C Virus inhibits the activity of IFN-$\gamma$, despite of this, its concentration has been controversial in different populations. In our population, the levels were low with the exception for F2 ($p<0.01$). Another important factor of inflammation is TNF-$\alpha$, which was found increased in all stages: F0-F4 and in F2 up to 6 times more than the CT and F4 groups ($p<0.001$). When analyzing the results of anti-inflammatory cytokines; the highest concentration of IL-10 was observed in F2 (increased up to 7 times) ($p<0.001$), while for IL-1RA in F2 it was found to be increased up to 10 times more than in F1 and F3 ($p<0.05$); what it shows that in F2 the inflammatory/anti-inflammatory microenvironment at the peripheral level has more activity. On the other hand, the highest concentration of IL-1RA was observed in F4, which may be actively participating in the repair due to decreased mediators of inflammation.

**Conclusions:** The F2 stage is an important turning point, indicating a shift in the microenvironment due to the accumulation of the extracellular matrix, making it clear the importance of measuring inflammation at intermediate stages of fibrosis, which would allow for impacting the limitation of the hepatic fibrogenic process.

**Ethics statement:** The protocol was approved by the Ethics and Research commissions of the General Hospital of Mexico "Dr. Eduardo Liceaga" (HG/DI/16/107/03/082), and from the Medicine Faculty UNAM (FMD/DI/15/2015)

**Declaration of interest:** None.

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## Nopal and Pirfenidone Ameliorate Epididymal Fat Weight and Anthropometric Parameters in a Mouse Obesity Model with Diethylnitrosamine

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**Introduction and Objectives:** Obesity is associated with liver diseases. Mexico has a high prevalence of obesity and metabolic