

293 Db/m (249-334); $p=0.034$ ], both groups seemed similar regarding steatosis severity. Surprisingly, liver stiffness between G1 and G2 was similar [6.4 kPa (4.9-8.1) vs 6.3 kPa (4.9-9.1); $p=0.49$ ]. Advanced fibrosis ( $TE < 8.0$  kPa) was discarded in 66.7% of G1 and 69.2% of G2 ( $p=0.18$ ). Overall, 15% had advanced fibrosis with a trend to a higher prevalence in G1 (16.1% vs 13.5%;  $p=0.08$ ).

**Conclusions:** Although outpatients from lower complexity settings were younger, advanced fibrosis prevalence was similar and not neglectable compared to high complexity center outpatients. Screening MASLD patients in lower-complexity settings increases the chance of identifying younger individuals with advanced liver disease who need expert's evaluation to prevent liver-related complications. Additionally, public policies might be implemented to reallocate patients with lower and severe diseases accordingly.

<https://doi.org/10.1016/j.aohep.2024.101619>

## P-6 CORRELATION BETWEEN CONNECTIVE TISSUE GROWTH FACTOR (CTGF) AND FIBROSIS DEGREE IN PATIENTS WITH PRIMARY BILIARY CHOLANGITIS (PBC)

Cristian Yamín Sánchez Sánchez<sup>1</sup>,  
Diego Fernando Abendaño Rivera<sup>2</sup>,  
Viridiana López Ladrón De Guevara<sup>2</sup>,  
María Argentina Díaz Castro<sup>2</sup>,  
Fátima Higuera de la Tijera<sup>2</sup>,  
Carolina Guzmán Arriaga<sup>3</sup>,  
Ángel Daniel Santana Vargas<sup>4</sup>,  
José Luis Pérez Hernández<sup>2</sup>

<sup>1</sup> GENERAL HOSPITAL OF MEXICO, MEXICO CITY, México

<sup>2</sup> DEPARTMENT OF GASTROENTEROLOGY AND HEPATOLOGY GENERAL HOSPITAL OF MEXICO "DR. EDUARDO LICEAGA" MEXICO CITY, MEXICO, MEXICO CITY, Ecuador

<sup>3</sup> LIVER, PANCREAS, AND MOTILITY LABORATORY, EXPERIMENTAL MEDICINE UNIT GENERAL HOSPITAL OF MEXICO "DR. EDUARDO LICEAGA" MEXICO CITY, MEXICO, MEXICO CITY, México

<sup>4</sup> RESEARCH DEPARTMENT GENERAL HOSPITAL OF MEXICO "DR. EDUARDO LICEAGA" MEXICO CITY, MEXICO, MEXICO CITY, México

**Conflict of interest:** No

**Introduction and Objectives:** Connective Tissue Growth Factor (CTGF) is a multifunctional protein recognized as an important mediator in fibrogenic pathways in liver diseases. Primary Biliary Cholangitis (PBC) is a chronic autoimmune disease that affects the bile ducts. It is characterized by inflammation and progressive fibrosis of the bile ducts, which can lead to stenosis, cholestasis, and long-term liver damage.

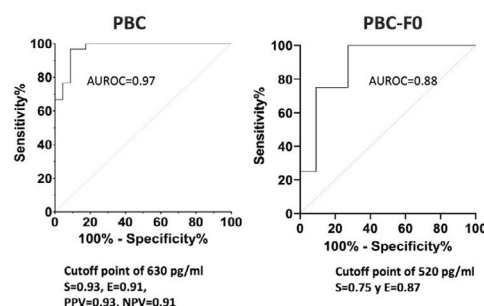
The objective of this study is to establish the correlation between serum levels of Connective Tissue Growth Factor (CTGF), measured using Enzyme-Linked Immunosorbent Assay (ELISA), and the degree of hepatic fibrosis assessed by transient elastography in patients with cholestasis diagnosed with Primary Biliary Cholangitis (PBC).

**Patients / Materials and Methods:** Prospective, analytical, experimental study. Three groups were recruited: the first group comprised patients with cholestasis, the second group comprised patients with cirrhosis due to Hepatitis C Virus (HCV), and the third group comprised healthy subjects. Anthropometric and biochemical data were collected. A blood sample was collected to quantify serum levels of CTGF using ELISA. The degree of fibrosis was determined by transient elastography. **Statistical analysis:** Data are presented as Mean $\pm$ SD or Median

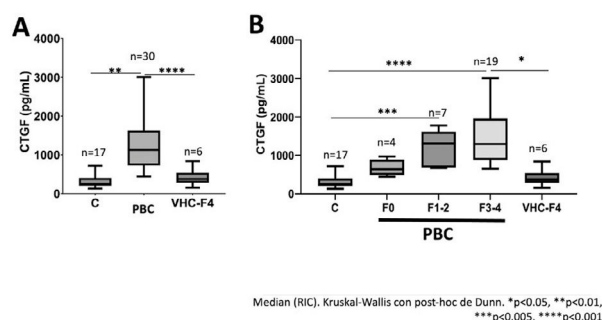
(IQR 25-75). They were analyzed by one-way ANOVA with Tukey's post-hoc test or Kruskal-Wallis with Dunn's post-hoc test. The following parameters were calculated: Sensitivity (S), Specificity (E), Positive Predictive Values (PPV), Negative Predictive Values (NPV), and the area under the ROC curve (AUROC). A  $p$ -value  $<0.05$  was considered significant.

**Results and Discussion:** Thirty patients with cholestasis diagnosed with PBC were included, along with a group of subjects with cirrhosis due to Hepatitis C Virus (VHC-F4,  $n=6$ ), and a control group without liver disease (C,  $n=17$ ). It was observed that there is a positive correlation between CTGF levels and the degree of fibrosis in patients with cholestasis (PBC), but not in patients with cirrhosis due to HCV. Using a cutoff point of 630 pg/mL, a sensitivity (S) of 0.93, specificity (E) of 0.91, positive predictive value (PPV) of 0.93, negative predictive value (NPV) of 0.91, and an area under the ROC curve (AUROC) of 0.97 with a Youden index of 0.85 were obtained (Figure 1). With a serum CTGF value of 520 pg/mL in patients with PBC without fibrosis or with moderate fibrosis compared to controls and HCV-F4, a sensitivity (S) of 0.75, specificity (E) of 0.87, and AUROC of 0.88 for F0, and a sensitivity (S) of 0.91, specificity (E) of 0.87, and AUROC of 0.94 for F2 were identified (Figure 1). Regarding the degree of fibrosis, CTGF was significantly higher in F4 compared to F0 in patients with PBC. In the case of the VHC-F4 group, there were no differences compared to the group without liver disease, suggesting a specificity of CTGF for fibrosis due to cholestatic disease (Figure 2).

**Conclusions:** There is a direct correlation between serum levels of CTGF in patients with cholestasis and the degrees of fibrosis measured by transient elastography, as well as specific cutoff points for discrimination with and without fibrosis for PBC.



**Figure 1.** (A) ROC curve of serum CTGF levels in patients with PBC and advanced fibrosis. (B) ROC curve of serum CTGF levels in patients with PBC without fibrosis.



**Figure 2.** (A) Box and whisker plot of the 3 study groups and the CTGF value. (B) Box and whisker plot of the study groups, the PBC group by fibrosis grades, and the CTGF value.

<https://doi.org/10.1016/j.aohep.2024.101620>