

with the presence or severity of the liver disease. Clinical presentation varies from mild asymptomatic form to cirrhosis with the need for liver transplantation in these patients. The most common initial suspicion is hepatomegaly and transaminases alteration and laboratory studies and histology alteration. Hepatic fibroelastography represents an emerging method of study for diagnosis, as it represents one of the forms of confirmation of the criteria for liver disease associated with cystic fibrosis. Liver biopsy provides information on the predominant type of lesion (steatosis or focal cirrhosis) and the extent of portal fibrosis. However, it should be taken with caution because of the risk of underestimating the severity of the lesions.

Conclusions: Although the liver disease in cystic fibrosis does not represent the initial manifestation, the evaluation and monitoring in these patients are important for prognosis and survival since it can progress to cirrhosis and liver failure.

The authors declare that there is no conflict of interest.

Table 1
Liver function tests during evolution

	11.10.2018	19/01/21	05/06/21
TBil	0.33	0.38	
DBili / IBili	0.08 / 0.25	0.14 / 0.24	
AST /ALT	81 / 69	99 / 95	
GGT	99	70	
ALP	381	388	
LDH	586	309	
Protein/Alb	7.4 / 4.4	6.9 / 4.30	
PT/ INR/PTT	15 / 1.16 / 31	15 / 1.16 / 31	
TC		127	119
TG		81	174
HDL-C		43.1	32.2
LDL-C		78	72

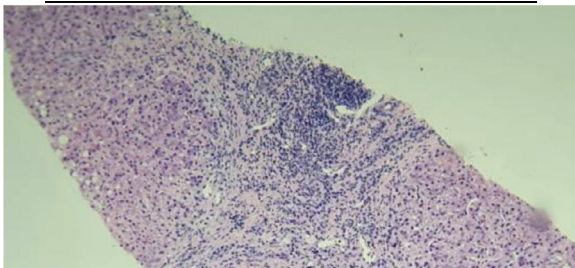


Image 1. Hepatic biopsy with steatosis

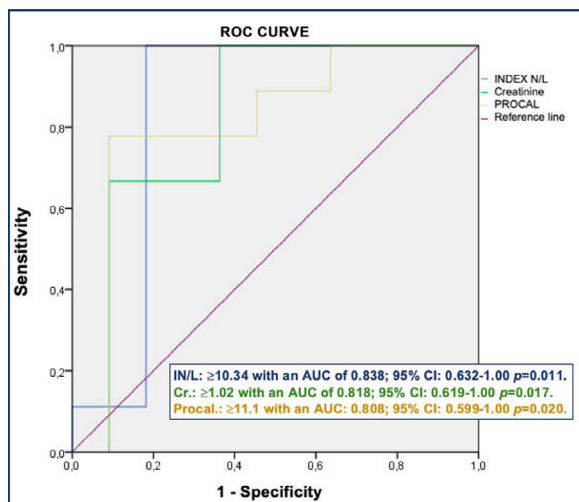


Image 2. Hepatic biopsy with moderate lymphoplasmacytic infiltrate

<https://doi.org/10.1016/j.aohep.2021.100623>

NEUTROPHILE/LYMPHOCYTE INDEX (IN/L), CREATININE (Cr), AND PROCALCITONIN (PROCAL) AS PREDICTORS OF AMEBIAN LIVER ABSCESS.

C.A. Campoverde-Espinoza, A. Martínez-Tovar, F. Higuera de la Tijera

Hospital General de México "Dr. Eduardo Liceaga".
Ciudad de México, México

Introduction and Objectives: A liver abscess (HA) is the accumulation of purulent material in the liver parenchyma that can be bacterial, parasitic, fungal, or mixed. The incidence ranges from 2.3 to 22 per 100,000 people. In Mexico, the annual incidence of amoebic HA is 6.7 per 100,000 inhabitants.

AIM: Determine the cut-off points for the neutrophil/lymphocyte index (IN/L), creatinine (Cr), and procalcitonin (Procal) to predict the etiology of liver abscess.

Materials and Methods: Research design: cross-sectional.

Procedure: We analyzed medical records of patients admitted during 2019 with HA diagnosis and amoeba PCR. The qualitative variables were expressed in frequencies and percentages. The numerical variables in means and standard deviation. We use X², Fisher's exact, Student's t, and Mann-Whitney U to compare groups as appropriate. ROC curve was used to determine sensitivity (S), specificity (E), positive predictive value (PPV), negative predictive value (NPV), and likelihood value (+ LR). The p-value <0.05 was considered statistically significant.

Results: Out of a total of 32 patients diagnosed with HA during 2019, 20 patients treated with drainage and a PCR test for amoeba from the abscess fluid were included. Of these, 85%(17) were men, with a mean age of 45.33 ± 10.93 years. 45%(9) were of amoebic etiology. In the latter group, the etiology can be predicted with the neutrophil/lymphocyte index with a cohort point of ≥ 10.34 with an AUC of 0.838, S: 100%, E: 81%, PPV: 81%, NPV: 100%. (9/11 vs 0/0 [81.8% vs 0.0%] +LR: 5.49; 95%CI:1.50-14 $p=0.000$). The creatinine value of ≥ 1.02 with an AUC of 0.818, S: 66.7%, E: 90.9%, PPV: 85.7%, NPV: 76.9%, (6/7 vs 3/13 [85.7% vs 23.1%] +LR: 7.33;95% CI:1.07-50 $p=0.017$) and with a procalcitonin cohort point of ≥ 11.1 with an AUC: 0.808, S: 77.8%, E: 90.9%, PPV: 85.7%, NPV: 87.5%, (7/8 vs 2/12 [87.5% vs 16.7%] +LR: 8.56;95% CI:1.28-57 $p=0.005$), with these cut-off points a significant difference was evidenced between the amoebic vs bacterial etiology, for IN/L: $p=0.000$, for Cr: $p=0.017$ and for procalcitonin: $p=0.005$, which are shown in figure 1.

Discussion: Amebic HA is etiologically more frequent in the West and generally in countries with poor infrastructure and development. It reports high mortality with conservative treatment and multiple abscesses, so it is crucial to identify their etiology. In the present study, we propose the cut-off points of biochemical markers for the diagnosis of amoebic HA through IN/L, Cr, and procal that are accessible in units where there is no amoeba CRP.

Conclusions: We were able to determine an adequate AUC and good sensitivity, specificity, positive and negative predictive value; therefore, we could use these biochemical markers to predict the etiology of liver abscesses.

The authors declare that there is no conflict of interest.

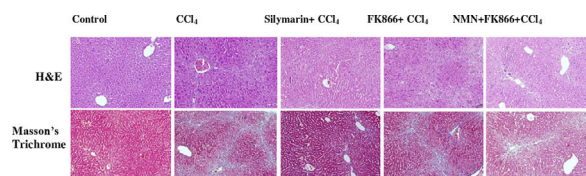


Figure 1. ROC curve graph: indicates the sensitivity and specificity of the cut-off point of the neutrophil/lymphocyte index, creatinine, and procalcitonin to predict abscess diagnosis amebic liver.

<https://doi.org/10.1016/j.aohep.2021.100624>