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Introduction and Objectives: Coronary artery disease (CAD) is a leading cause of morbidity and mortality worldwide. Reliable knowledge of the prevalence of occult CAD, particularly anatomically confirmed CAD is limited and cardiovascular risk (CVR) models only predict the risk of an acute coronary event within a set period. It has been described that a FIB-4 score is associated with a higher CVR. Determine what is the utility of noninvasive markers of liver fibrosis in CAD.

Materials and Patients: A cross-sectional study was conducted in two tertiary centers in central and western Mexico from March 2019 to April 2023. Patients who required percutaneous coronary angiography were studied and demographic data and coronary angiographic were recorded. Noninvasive fibrosis indexes were calculated. Continuous variables were subjected to a distribution analysis and equality of variances to subsequently perform a mean comparison analysis with U-Mann-Whitney test between patients with monovascular, bivascular and trivascular involvement. A correlation analysis was also performed between the invasive markers and the Syntax index.

Results: A total of 168 patients were included with a mean age of 66 ± 12 years with a predominance of male sex with 75.6% (n= 127). Angiographic findings included 37.5%, monovascular, 32.7%, bivascular and 29.8% trivascular involvement. Comparison of means of noninvasive markers of fibrosis demonstrated a significant difference in HFS between patients with monovascular (0.17 \pm 0.18), bivascular (0.27 \pm 0.18) and trivascular (0.30 \pm 0.25) coronary artery disease, p=< 0.001. A correlation was also demonstrated between non-invasive markers and Syntax score: FIB-4 (r=: 820, p=<0.001), APRI (r=: 766, p=<0.001), HFS (r= 869, p=<0.001), (r= 820, p=<0.001), NFS (r= 807 p=<0.001)

Conclusions: The score of noninvasive tools to assess liver fibrosis correlates positively with the complexity of CAD and could be considered as noninvasive tools to be used in the assessment CVR.

Ethical statement

The protocol was registered and approved by the Ethics Committee. The identity of the patients is protected. Consentment was obtained

Declaration of interests

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Correlation between steatosis and fibrosis in patients with metabolic syndrome

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Introduction and Objectives: MAFLD is a highly prevalent cause of chronic liver disease, present in 70% of overweight people, 70% of diabetics, and 90% of morbidly obese people. It is the hepatic manifestation of the metabolic syndrome, defined by the presence of central obesity, insulin resistance, hyperlipidemia, hyperglycemia, and hypertension. The development of liver fibrosis is secondary to several factors, steatosis being one of them. To evaluate the correlation of steatosis with hepatic fibrosis in patients with metabolic syndrome using transition elastography.

Materials and Patients: Patients older than 18 years who met MALFD criteria were included, transition elastography was performed to calculate CAP and kilopascals, steatosis degree and fibrosis degree were calculated according to the myfibroscan application, for statistical analysis Pearson's bivariate correlations were used between CAP and kilopascal values. The association between the degree of steatosis and fibrosis was performed using the chi-square test. Was considered significant at p < 0.05.

Results: 94 patients were included, 20 men (21.3%), 74 women (78.7%), mean age 40.5 ± 10.02 , CAP 300.6 ± 63.4 , kilopascals 6.4 ± 2.7 , steatosis grade S0: 8, S1: 8, S2: 20, S3: 58, degree of fibrosis F0: 58, F1: 14, F2:14, F3: 6, F4:2. The correlation between CAP and kilopascals was moderate and significant RHO=0.343 P =0.001. A significant association was found between the degree of steatosis and that of fibrosis chi-square (12) =25.1, p=0.015. The proportions were 50% (S0:F0), 16% (S1:F3), 50% (S2:F3), 100% (S3:F4).

Conclusions: The correlation between steatosis and fibrosis is moderate, implying that there are other factors that influence the development of fibrosis and its progression, so metabolic control and other factors in patients with MALFD are highly relevant to prevent fibrosis progression.

Ethical statement

The protocol was registered and approved by the Ethics Committee. The identity of the patients is protected. Consentment was obtained.

Declaration of interests

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Acute liver failure secondary to co-infection of Hepatitis B and HIV

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Introduction and Objectives: We present the case of a man with hepatitis B and HIV coinfection diagnosed by serological studies which presented acute liver failure; the diagnostic approach, its treatment and outcome are described.

Materials and Patients: Provide information on the association of hepatitis B virus and HIV. When hepatotropic viruses are identified, intentionally find the association with other factors that cause acute