#187 - LOW NEGATIVE PREDICTIVE VALUE OF LIVER STEATOSIS FOR IDENTIFYING COMPENSATED ADVANCED CHRONIC LIVER DISEASE: A SINGLE-CENTRE TRANSIENT ELASTOGRAPHY-BASED STUDY

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BACKGROUND: Nonalcoholic fatty liver disease (NAFLD) is a significant cause of liver injury. Transient elastography (TE) with controlled attenuation parameter (CAP) is commonly used as a non-invasive modality to quantify liver steatosis (S) and fibrosis. The BAVENO VII emphasises that TE 7-10 kPa patients should be monitored case-by-case for changes indicating compensated advanced chronic liver disease (cACLD).

AIM: To estimate the prognosis accuracy of TE liver steatosis for cACLD in terms of ≥7 kPa.

METHODS: Cross-section study in NAFLD patients. Those with a history of significant alcohol intake, viral infection, severe weight loss, or on any hepatotoxic drugs were excluded. Liver steatosis (CAP) and fibrosis [kPa] through FibroScan® TE were correlated using the Pearson coefficient (ρ) and Fisher's exact test. Prognosis accuracy was estimated by sensitivity, specificity, and positive and negative predictive value (PPN and NPV, respectively).

RESULTS: 165 patients, median age 56 years (47-64), 88 females (53.3%), median body mass index (BMI) of 30 kg/m^2 (26-35). Diabetes mellitus in 94 patients (56.4%) and hypertension in 50 (30.3%). Median CAP and liver stiffness of 303 dB/m (264-333) and 5.8 kPa (4.6-7.3), with a ρ=0.101 (95% CI -0.05 to 0.250; p=.195). In patients with S0, S1, S2 and S3, there was liver fibrosis ≥7 kPa in 9/37 (24.3%), 1/3 (33.3%), 3/15 (20%) and 32/110 (29.1%) respectively (p=.8629) (**Figure 1**). An S2-3 predicts cACLD (≥7 kPa) with a sensitivity, specificity, PPV, and NPV of 25%, 78%, 75% and 28%, respectively.

CONCLUSIONS: Liver fibrosis was present even in patients with minimal hepatic steatosis. Liver steatosis has a low NPV to rule out cACLD (≥7 kPa). High liver steatosis is not a prerequisite to developing significant fibrosis. We underscore the importance of regular monitoring and early detection of liver fibrosis, irrespective of the degree of hepatic steatosis.

Figure 1. Cases with compensated advanced chronic liver disease (cACLD) in terms of a liver fibrosis ≥7 kPa. Cases have been distributed among different grades of steatosis (controlled attenuation parameter, CAP), measured in dB/m.