presence of any one of: varices on endoscopy, portal hypertensive bleeding, or porto-systemic collaterals on imaging. Univariate analysis was used to examine variables that can predict varices and CSPH. Multivariate model was constructed using a logistic regression analysis of statistically significant variables in univariate analysis. A sequential-testing algorithm was developed using the best performing model. **Results:** Of the 44 patients, 28 (64%) had varices and 35 (79.5%) had CSPH. LSM was higher in patients with varices (12.7 kPa vs 6 kPa, $p < 0.01$) and CSPH (12 kPa vs 5.4 kPa, $p < 0.01$). Platelet count was lower in patients with varices (71 vs 151, $p < 0.01$) and CSPH (84 vs 144, $p = 0.03$). Multivariate analysis combining LSM, and platelet count predicts varices (AUROC 0.82 ± 0.07, $p < 0.01$) and CSPH (AUROC 0.86 ± 0.07, $p < 0.01$). A step-wise algorithm combining LSM of 10 kPa and platelet of 80 x 10^9 /L was developed.(Figure) This algorithm performed with specificity of 81%, negative predictive value (NPV) of 81% and positive predictive value (PPV) of 89% to detect varices ($p < 0.001$). The same model performed with sensitivity of 77%, specificity of 89% and PPV of 96% to detect CSPH ($p < 0.001$). Accuracy of the model for predicting varices and CSPH was 93% and 80%, respectively. **Conclusion:** We developed a simple model by combining LSM with platelet count that can be used to identify CSPH in PSVD patients. This noninvasive model can predict the risk of varices and aid in deciding the need for endoscopic surveillance or initiating therapy for portal hypertension. However, this model requires further validation in a larger independent cohort.

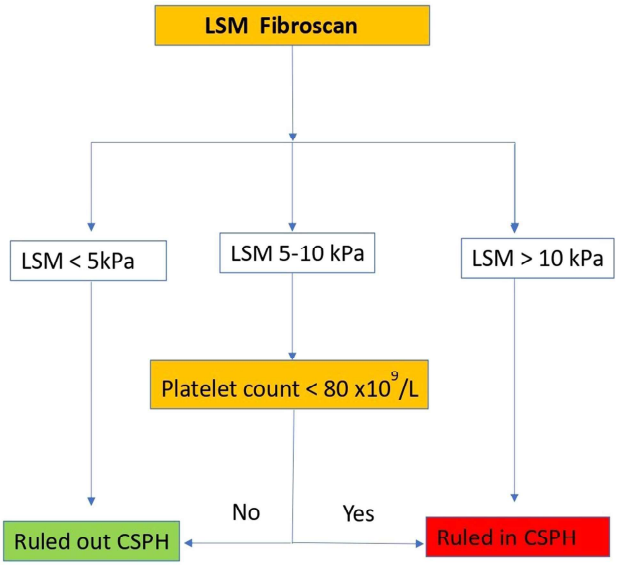

Figure: Step-wise decision algorithm

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3133-A | ACCURACY OF A DEDICATED 100 HZ VIBRATION-CONTROLLED SPLEEN STIFFNESS MEASUREMENT VERSUS BAVENO CRITERIA FOR THE DETECTION OF VARICES IN PATIENTS WITH COMPENSATED CIRRHOSIS

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Background: Clinically significant portal hypertension (CSPH) marks a critical step in the natural history of compensated advanced chronic liver disease (cACLD) and may lead to esophageal varices (EV). The Baveno VI criteria suggest liver stiffness measurement (LSM) and platelet count (PLT) for non-invasive identification of cACLD patients not requiring screening gastroscopy. We investigated the accuracy of the novel 100 Hz vibration-controlled transient elastography-based spleen stiffness measurement (SSM) exam for the identification of EV in cACLD patients. **Methods:** Retrospective study of Mainz, Vienna, Leuven, Rome and Palermo. Patients with cACLD of any etiology (LSM ≥ 10kPa or histological F4 fibrosis), but without previous decompensation (bleeding, encephalopathy, ascites) were included. SSM and LSM were obtained using Fibroscan F630 ≤ 1 month within screening gastroscopy. Prediction performance between different SSM cut-offs with respect to the Baveno criteria (LSM > 20kPa and/or PLT < 150 G/L) were compared by logistic regression with 10-fold cross-validation, adjusted for age, gender, BMI, transaminases, INR, albumin, and bilirubin. Backward feature selection based on likelihood ratio test was applied to identify significant confounders. Performance was calculated by

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balanced accuracy (BA), specificity (SP) and sensitivity (SE). Wilcoxon test was used to evaluate significant performance improvement of SSM cut-offs with respect to Baveno criteria, or to signifcant confounders. **Results:** 343 cACLD patients with a median age of 59 years (60.3% male) and NAFLD as the main etiology (51.3%) were included. 137 had EV with 49 high-risk EV (HR-EV), while median SSM, LSM and PLT were 40.5kPa, 21kPa and 139 G/L, respectively. The figure shows BAs at different SSM cut-offs, compared to Baveno (red line). The best overall performance with all-type EV was at SSM = 60 kPa (BA = 0.72, SP = 0.86, SE = 0.58); Baveno: BA = 0.66, SP = 0.86, SE = 0.39. Comparing HR-EV vs. absence of EV, the best cut-off was at 50kPa (BA = 0.71, SP = 0.95, SE = 0.47; Baveno: BA = 0.56, SP = 0.92, SE = 0.29). These SSM thresholds significantly improved BA when significant confounders were considered. **Conclusion:** The novel spleen-dedicated 100 Hz SSM is associated with presence of EV in cACLD patients. In both all-type EV and HR-EV, SSM showed better accuracy than the Baveno LSM-PLT criteria, achieving a better trade-off between SP and SE.

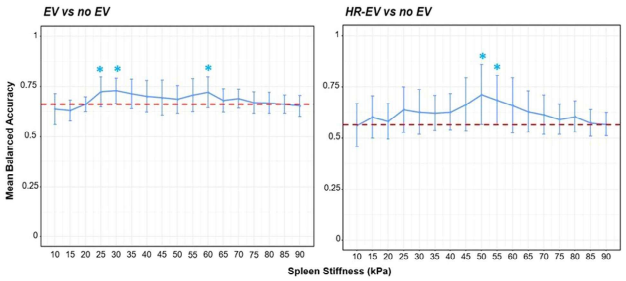

Figure 1. Mean Balanced Accuracy at different Spleen Stiffness cut-offs. Dashed red line: Baveno performance. The asterisk indicates that the SSM models showed a balanced accuracy significantly higher (i.e. Wilcoxon test p-value >5%) with respect to both the same model including only the selected confounders and Baveno.

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The following people have nothing to disclose: Angelo Armandi, Tiziana Sanavia, Emma Vanderschueren, Georg Semmler, Antonio Liguori, Salvatore Petta, Maurice Michel, Merle Marie Werner, Talal Merizian, Christian Labenz, Mathias Jachs, Mattias Mandorfer, Luca Miele, Jörn M. Schattenberg

3134-A | AN INTERNATIONAL SURVEY ON PRACTICE PATTERNS FOR THE MANAGEMENT OF GASTRIC VARICES

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Symbols: ♦, Poster of Distinction; ★, Foundation Award Recipient