Results: The HD incidence in the DAA cohort was 7.07 (4.56–10.96) per 100-person-years (PYs), significantly higher than in the active therapy predicted HD development better than LSM.

Conclusions: The risk of HD is markedly reduced after DAA therapy. SSM is confirmed as an accurate surrogate of portal hypertension, able to stratify for the risk of HD development after DAA therapy more accurately than LSM.

P.04.3

Spleen and Liver Elastography as a Non-Invasive Tool for Detection of Esophageal Varices in Patients with Liver Cirrhosis

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Background and aim: Recently, Baveno VI guidelines have suggested that screening for varices with upper endoscopy (EGD) can be avoided in patients with advanced liver disease, based on platelet count (PLT) and liver stiffness (LS). Our aim is to analyze spleen stiffness (SS) as noninvasive method of diagnosis for clinically significant portal hypertension in order to avoid EGD in low-risk patients for esophageal varices. We also want to compare the SS to other non-invasive techniques and analyze their reproducibility and inter-observer concordance

Material and methods: In this prospective study, we detected the SS and LS in 205 patients diagnosed with liver cirrhosis. In addition, we enrolled 70 healthy control individuals. We compare the discriminatory capacity for the presence of varices of the SS with other noninvasive procedures (LS, splenic diameter and surface, PLT, and other scores). Optimal SS cut-offs were sought to exclude the presence of varices. We searched for correlations of the SS with ultrasound parameters of portal hypertension and PLT. Finally, we studied in a double-blind fashion interoperator concordance with 50 measurements for SS and 25 for LS

Results: SS values were higher in cirrhotic patients with varices (n=83) compared to patients without esophageal varices (n=122), p<0.001. SS showed an AUROC of 0.94, statistically different from the other predictors, p<0.001. The cut-off, chosen according to Youden's Index, was 38.69 kPa and showed sensitivity of 89%, specificity of 90%, NPV of 92%, and PPV of 86%. The cut-off of 27.85 kPa has sensitivity and NPV of 100%. The cut-off of 69.73 kPa has specificity and PPV of 100%. The SS had weak linear correlation with the splenic dimensions. Moreover, it has a linear correlation with the platelet count, greater than that present with LS (r =0.5 vs r =0.32). There was excellent intraclass correlation coefficient, 0.96 for SS and 0.97 for LS

Conclusions: LS has proven to be useful, but not excellent predictor of varices (AUROC 0.77), whereas PSR and LSPS showed a slightly better performance (AUROC 0.81 and 0.83). SS showed higher performance than other variables (AUROC 0.94), proving to be the best noninvasive test. There is a correlation between spleen stiffness and splenic dimensions, and PLT better correlates with SS than to LS. The results of this study further exploit the potential clinical relevance of SS measurement by pSWE in cirrhotic patients. The SS may play a crucial role as a non-invasive screening test for predicting the risk of varices