0.076 ± 0.01. Among patients successfully genotyped for HBV (n = 57), most of them (47/57; 82.5%) were infected with HBV Gt-D; in such patients, HDV Sgt-1e and 1c were equally distributed (23/47, 48.9% vs. 21/47, 44.7%). Finally, Sgt-1e was associated with lower HBsAg (3.55, IQR 2.45–3.96 Log IU/mL vs 3.73, IQR 2.91–4.09 Log IU/mL; p < 0.037) and HBcrAg levels (3.30, IQR 2.6–4.3 Log U/mL vs 3.70, IQR 2.8–4.6 Log UI/ml; p < 0.020) compared to patients infected with other HDV Sgts. No further associations were found with available clinical, biochemical, and virological parameters.

Conclusion: In Italy, the most frequently observed HDV Sgts are 1c and 1e. The former is prevalent among foreign-born patients while the latter is prevalent among native italians. The association between HDV Sgt-1e and lower levels of HBV antigens may reflect a peculiar interplay between these two viruses.

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SAT-248-YI

End of treatment anti-HBc IgG and HBcrAg predict severe flares after nucleos(t)ide analogue withdrawal in CHB – interim analysis from the multicenter prospective COIN-B trial

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Background and aims: Nucleos(t)ide analogue (NUC) withdrawal in chronic hepatitis B has been proposed as a strategy to increase functional cure rates, but the possibility of severe flares necessitates close off-treatment monitoring. Baseline predictors to identify patients at risk for such flares would improve the safety. We thus investigated several biomarkers for the prediction of flares within 24 weeks after NUC cessation in a multicenter prospective clinical trial (COIN-B, NCT04779970).

Method: End of treatment (EOT) samples of 85 start of treatment HBeAg negative, non-cirrhotic (<F3), long-term (>3 years) NUC suppressed chronic HBV patients were analyzed. Patients were monitored every 2–4 weeks. Hepatitis B surface antigen (HBsAg) (Limit of Detection (LOD) 0.05 IU/mL) and HBV RNA (LOD 3 cp/mL; Limit of Quantification (LOQ) 10 cp/mL) were analyzed on the Cobas (Roche) analyzer. Hepatitis B core related antigen (HBcrAg) (LOD 2 logU/mL; LOQ 3 logU/mL) and hepatitis B core IgG antibodies (anti-HBc IgG) (LOD 0.5 IU/mL; LOQ 0.8 IU/mL) were analyzed on the Lumipulse (Fujirebio) G600 platform.

Results: Majority of patients were male (72.9%) with a median (IQR) age of 47 (13) years. 63/85 (74.1%) were treated with tenofovir and the median (IQR) duration of last NUC treatment was 7.2 (4.8) years. Severe virological (SVF) (HBV DNA >5 log IU/mL) and severe biochemical flares (SBF) (ALT > 10×ULN) were observed in 34 (40.0%) and 19 (22.4%) patients respectively. There is an increased odd for having a viral flare (HBV DNA > 2000 IU/mL, n = 77/85) per log increase of HBsAg at EOT (OR 2.41, 95% CI 1.22–5.36, p = 0.01). 25 (30.1%) patients had HBV RNA > LOD at baseline, 13 (52.0%) of those were > LOQ. HBV RNA > LOD is not associated with any type of flare. HBcrAg was >LOD in 51 patients (60.0%), of which 29 (56.9%) were >LOQ. SVF (p = 0.006) and SBF (p = 0.03) were more frequently observed in patients with HBcrAg >LOD at baseline. Patients with HBcrAg >LOD had an OR 4.34 (95% CI 1.67–12.48, p = 0.004) and OR 4.72 (95% CI 1.41–21.70, p = 0.02) for a SVF and SBF respectively. The respective negative predictive value (NPV) to identify SVF and SBF based on HBcrAg >LOD are 79.4% and 91.1%. There is a significant decrease in the odds for having a SVF (OR 0.46, 95% CI 0.21–0.93, p = 0.04) and SBF (OR 0.20, 95% CI 0.07–0.50, p = 0.001) per log increase of anti-HBc IgG. An EOT anti-HBc IgG of ≤475 IU/mL allowed the identification of SVF and SBF with a NPV of 74.3% and 97.1% respectively. Multivariate logistic regression including HBcrAg and anti-HBc IgG pointed towards HBcrAg >LOD as an independent predictor for SVF (aOR 4.57, 95% CI 1.66–14.17, p = 0.005) and SBF (aOR 6.18, 95% CI 1.46–43.14, p = 0.03) and lower anti-HBc IgG for SBF (aOR 0.21, 95% CI 0.06–0.55, p = 0.004).

Conclusion: EOT serum anti-HBc IgG and HBcrAg but not HBV RNA nor HBsAg are associated with severe flares after NUC cessation in a multicenter prospective trial. Anti-HBc IgG and HBcrAg show promise to identify the patients at highest risk for adverse outcomes and may guide future treatment cessation strategies.

SAT-253

DM type 2 is a significant risk factor for HCC and decompensation of liver disease in HBV s Ag positive patients

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Background and aims: Hepatitis B virus (HBV) infection is a significant cause of liver disease, liver transplantation, and hepatocellular carcinoma (HCC). Various factors contribute to liver outcomes and mortality in HBV patients. However, there is limited data on the influence of metabolic factors, such as type 2 diabetes mellitus (T2DM), which is closely associated with the development of metabolic-associated steatotic liver disease (MASLD), on liver outcomes in patients with HBV.

This study aim to analyze the factors influencing liver outcomes and mortality in HBsAg-positive patients in Israel

Method: Clalit Health Services (CHS), the largest Health Maintenance Organization (HMO) in Israel, serves over 4.5 million people. We conducted a retrospective big data study analyzing all patients who