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Conclusion: In the absence of variceal haemorrhage portal hypertension is under recognised. Comorbidities affecting patients in group 3 reported at higher levels than in groups 1 and 2 include CKD, IHD and heart failure. In patients with portal hypertension it’s important to address comorbidities in addition to the underlying liver disease.

FR487 Durability of immune response to SARS-CoV-2 vaccination in patients with liver cirrhosis (LC) as compared to healthcare workers (HW)

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Background and aims: Patients with advanced liver disease have well recognized deficiencies in innate and humoral immunity. Phase 3 trials on both BNT162b2 and mRNA-1273 included an extremely limited number of pts with liver diseases. Real life data on vaccine response in cirrhotics is lacking. To characterize the longitudinal anti-SARS-CoV-2 response in LC as compared to an age and gender matched HW population.

Method: In pts with established diagnosis of LC ± portal hypertension, levels of binding antibodies at baseline before the first BNT162b2 dose, 7 and 31 days after the first dose and 90 and 180 days after the second dose were evaluated and compared to HW levels at similar time-points. Semiquantitative serological testing for IgG antibodies anti S1 domain was performed by anti-SARS-CoV-2 QuantifVac ELISA (EUROIMMUN); cut-off for positivity = 32.5 BAU/ml. Swab test was performed in suspected cases by RT-PCR kit (ROCHE Diagnostics). Micro neutralization test using wild type virus is ongoing. LC pts were matched 3:1 with HW. Both pts and HW had received BNT162b2 vaccine.

Results: Among 207 LC pts identified so far, 178 have results currently available at the different time-points. After a careful analysis of the swab tests results, 28 pts COVID experienced were identified. Of 150 SARS-CoV-2 naive, 86 (58%) were male, mean age 65.4 ± 4. Pts with HCV etiology were 67%, pts with portal hypertension 29%. Geometric Mean of anti-SARS-CoV-2 antibody levels overall and by gender among LC pts and HW in the Table. Higher levels of anti-SARS-CoV-2 were observed in HW as compared LC at d7 (p = 0.007) and d31 (p = 0.063), as well as at d90 (p = 0.0049) and d180 (p = 0.039). At d180, the number of pts with results lower than the assay’s threshold was higher among LC than in HW (5 vs 0, P = 0.0028). Irrespective of age, female pts were more likely to have higher anti-SARS-CoV-2 levels as compared to male at late time points.

| Timepoints | HW (n = 50) | LC (n = 150) |
|------------|-------------|--------------|
|            | d7 | d31 | d90* | d180* |            | d31 | d90* | d180* |
| Total      | 6.78 (5.94-16.10) | 680.66 (532.45-870.13) | 300.97 (240.7-388.94) | 153.59 (127.15-185.53) | 4.04 (2.82-5.79) | 442.1 (320.7-669.49) | 102.31 (128.43-787.96) | 83.1 (38.32-160.19) |
| Male (54%) | 11.02 (6.24-28.6) | 639.78 (477.35-854.5) | 246.81 (181.1-333) | 164.46 (124.09-217.96) | 4.33 (2.65-6.99) | 470.62 (306.83-722.35) | 216.39 (127.23-367.71) | 125.94 (72.24-453.2) |
| Females (46%) | 7.89 (3.61-17.71) | 722.33 (473.06-1133.42) | 389.01 (286.48-563.66) | 143.01 (108.15-187.37) | 1.68 (1.10-6.43) | 409.09 (246.83-682.03) | 173.62 (92.07-307.29) | 83.61 (21.74-186.13) |

*after the second dose; * P = 0.028; **P = 0.024

Conclusion: Decreasing portal hypertension via TIPS insertion leads to a significant improvement of SI over time, which is associated with a favorable clinical outcome.
FRI489
A simple model for predicting survival in cirrhotic patients undergoing portosystemic shunt embolization
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Background and aims: Portosystemic shunt embolization (PSSE) is an effective treatment for hepatic encephalopathy and gastric varix in patients with portosystemic shunt. However, some of the patients rapidly progress to hepatorenal syndrome and hepatic failure after PSSE. The aim of this study was to develop a prognostic model for predicting survival in patients treated with PSSE.

Method: We included 188 patients with portosystemic shunt who received PSSE for gastric varix or recurrent hepatic encephalopathy to develop a prediction model for 1-year mortality using a Cox proportional-hazard model incorporating significant prognostic factors, which was validated in a separate cohort of 184 patients.

Results: Using multivariable analysis, baseline serum levels of total bilirubin, albumin, and international normalized ratio (INR) were the independent prognostic factors that were significantly associated with the 1-year survival of the patients. An Albumin-Bilirubin-INR (ABI) score was developed assigning 1 point for each of the above factors, with scores ≥2, 2–1, and <1 corresponding to good, intermediate, and poor survival, respectively. The discriminative performance of the ABI score was compared with that of the MELD and Child-Pugh scores. The ABI score showed a better calibration performance than other scores, especially in patients at high-risk. The calibration plots of the ABI score were closer to the line of good calibration than those of the MELD score.

Conclusion: The novel ABI score, which is easier to calculate than MELD or Child-Pugh scores, may help identify a proper indication for PSSE in cirrhotic patients with portosystemic shunt.