

## Clinical hepatology

IDDF2020-ABS-0013 **EFFECTIVENESS AND SAFETY OF GLECAPREVIR AND PIBRENTASVIR FOR HEMODIALYSIS PATIENTS WITH HEPATITIS C VIRUS INFECTION AT A SINGLE CENTER**

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10.1136/gutjnl-2020-IDDF.133

**Background** Glecaprevir/pibrentasvir(GLE/PIB) is anpan-genotypic regimen for the treatment of hepatitis C virus(HCV) infection. GLE and PIB are direct-acting antiviral(DAA)agents that can be used for patients with chronic renal failure who are on hemodialysis(HD) and those with HCV genotype 2 infections. Here, we report the usefulness and safety of GLE/PIB in 13 hemodialysis(HD) patients with HCV infection.

**Methods** The subjects comprised patients with genotype 1and 2(six each) and one unknown genotype patients in whom GLE/PIB therapy was introduced by December 2018. The mean age was 69.2(59–78)years (seven men and six women). The mean HCV RNA amount prior to treatment initiation was 4.81(2.1–6.5). The administration periods were 8 and 12 weeks(n=9 and 4, respectively).

**Results** Twelve patients received all the doses orally while an increase in total billrubin(T-BIL) caused the administration to be discontinued in one patient. HCV RNA at week 4 after treatment initiation became undetectable 1nn 11(91.6%) of the 12 patients. All patients achieved a rapid viral response (RVR). Concerning adverse effects, although itching occurred in three(25%) patients, the symptom improved following administration of oral medication, and the treatment was able to be continued.

**Conclusions** The results suggest that GLE/PIB can also be safely administered to HD patients. However, the usefulness and safety need to be further studied by examining more cases.

IDDF2020-ABS-0032 **CLINICAL DETERMINANTS OF MULTIDISCIPLINARY INTERVENTION AND PROLONGED ENDOSCOPIC THERAPY IN ERADICATING HIGH-RISK ESOPHAGOGASTRIC VARICES**

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10.1136/gutjnl-2020-IDDF.134

**Background** High-risk esophagogastric varices (EGV) are prone to bleeding and are recommended to be eradicated through endoscopic therapy by practice guideline. However, a considerable number of patients may fail the endoscopic variceal eradication (VE) when second-line non-endoscopic treatments, including radio-interventional and surgical therapy are required. To date, predictive factors for the multidisciplinary therapy switch are unclear. We aimed to investigate factors that determine the therapy switch and the length of endoscopic therapy to VE.

**Methods** We carried out this retrospective study based on an established cohort of cirrhosis recruiting patients from 2011 to 2018. Relevant medical and endoscopic data were collected and comprehensively assessed. Multivariate analyses were performed to identify factors associated with the therapy switch in all included patients, and the length of time to VE in endoscopic VE-achieved patients.

**Results** A total of 330 patients were included for analysis, of which 289 cases (87.6%) achieved VE through sequential endoscopic therapies. The median (Interquartile range, IQR) time to VE was 5 (2–10.5) months and the median (IQR) number of endoscopic sessions required was 3 (2–5). Meanwhile, thirty-two cases (9.7%) failed endoscopic VE and transferred to multidisciplinary therapy during endoscopic intervals (25 cases for surgical therapy and 7 cases for radio-interventional therapy). Multivariate analysis showed that splenomegaly (hazard ratio, HR 1.21, 95%CI 1.09–1.34), portal vein thrombosis (HR 2.88, 95%CI 1.20–6.88) and thrombocytopenia (HR 0.99, 95%CI 0.97–1.00) were associated with the therapy switch. Among endoscopic VE-achieved patients, male sex (HR 1.49, 95%CI 1.12–1.99), large varices (HR 4.01, 95%CI 2.22–7.23), long-segment varices (HR 1.70, 95%CI 1.04–2.78), and intercurrent bleeding (HR 2.24, 95%CI 1.53–3.30) were associated with prolonged time required for VE.

**Conclusions** Patients with an enlarged spleen, portal vein thrombosis and low platelet count are at high risk of undergoing multidisciplinary therapy to eradicate EGV. Severe varices, male sex and interval bleeding event impair endoscopic efficacy significantly. Our findings may help improve patient risk stratification and medical resources allocation.

IDDF2020-ABS-0047 **CLINICAL USE OF NON-SELECTIVE BETA-BLOCKERS IN UNSELECTED CIRRHOTIC PATIENTS RECEIVING ENDOSCOPIC SECONDARY PROPHYLAXIS**

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10.1136/gutjnl-2020-IDDF.135

**Background** The combination of non-selective beta-blockers (NSBBs) and endoscopic band ligation has been recommended as the first-line therapy for preventing variceal rebleeding. However, little is known about the routine clinical use of this medication. We aimed to investigate the current situation of NSBBs use in respect of prevalence, tolerance and compliance in this study, and compare with that of endoscopic therapy.

**Methods** We prospectively recruited cirrhotic patients undergoing secondary prophylaxis in our department from May 2019 to Jan 2020. Relevant medical and endoscopic data were collected. Bedside interviews were carried out using the specifically designed questionnaire. Therapy compliance was also assessed during the 6-month follow-up after initial therapy. Univariate and multivariate logistic regression were performed to explore the factors associated with therapy compliance.

**Results** A total of 269 consecutive patients were screened, and 259 of them were included. Main etiologies of cirrhosis

were hepatitis B/C (72.2%) and alcohol consumption (10.0%). Fifty-two (20.1%) patients were on the treatment of NSBBs and 53 (20.5%) patients were treated with NSBBs before, whereas 23 patients (8.9%) were with contraindications. Thirteen patients (25.0%) achieved hemodynamic response and the target dose was 32.1 mg/d for propranolol and 12.5 mg/d for carvedilol respectively. Overall adverse effects (AEs) were substantially more prevalent in endoscopic therapy than in NSBBs therapy (61.4% vs 25.7%,  $P<0.001$ ), but severe AEs leading to therapy cessation were more prevalent in NSBBs therapy (12.4% vs 5.2%,  $P<0.001$ ). During the 6-month follow-up, 53.8% of patients on NSBBs showed good compliance and 59.0% of patients on endoscopic therapy showed good compliance ( $P=0.490$ ). Upon multivariate analysis, only old age and high work intensity were associated with poor drug compliance, while education background, healthcare insurance, AEs, drug dose and disease severity did not affect the compliance.

**Conclusions** Clinical use of NSBBs for cirrhotic patients is far from optimal considering the low prevalence and high proportion of ineffective low-dose. NSBBs medication bears a higher rate of severe AEs compared with endoscopic therapy. Therapy compliance of both NSBBs and endoscopy are unsatisfactory, and optimized follow-up management is greatly needed.

**IDDF2020-ABS-0050 SPIRAL CT IN THE CLINICAL SIGNIFICANCE OF PORTAL CAVERNOUS CHANGE IN HEPATOCELLULAR CARCINOMA**

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10.1136/gutjnl-2020-IDDF.136

**Background** Cavernous degeneration of portal vein (cavernous transformation of portal vein, CTPV) refers to the formation of a large number of collateral branches or recanalization after complete or partial obstruction of the main portal vein or its branches. To investigate the value of spiral CT dual phase scanning for diagnosis of portal cavernous degeneration of liver cancer.

**Methods** 103 cases of hepatocellular carcinoma with portal cavernous change were enrolled from the First Affiliated Hospital of Sun Yat-sen University between January 01, 2015, to December 31, 2018. The abdominal CT data were analyzed, including blood vessel cross-sectional features, hepatic parenchyma perfusion, CT findings and features of portal hypertension.

**Results** The main manifestations of CT were several small blood vessels around the portal vein in the occlusion position, the heavy ones were beaded, and the hepatic parenchyma was transient perfusion abnormality in the arterial phase, showing a zonal high-density shadow around the liver, the main findings were as follows: At the arterial stage, the hepatic parenchyma was abnormal. In the portal phase, the whole liver showed uniform density. In cirrhotic patients with portal hypertension, collateral circulation vessels (27/103), ascites (18/103), splenomegaly (45/103) were seen around the hilum of the spleen.

**Conclusions** Spiral CT dual-phase scanning is an effective method for diagnosis of portal cavernous degeneration of liver cancer, which can provide a necessary basis for clinical treatment and prognosis.

**IDDF2020-ABS-0051 ASSOCIATION BETWEEN TYPE-2 DIABETES MELLITUS AND PLATELET DISTRIBUTION WIDTH IN PATIENTS WITH PRIMARY LIVER CANCER**

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10.1136/gutjnl-2020-IDDF.137

**Background** To investigate the association between type-2 diabetes mellitus (T2DM) and platelet distribution width (PDW) in patients with primary liver cancers (PLC).

**Methods** We included 387 patients with a hospital discharge diagnosis of PLC from January 2010 to January 2017 in the MIMIC-III database were analyzed retrospectively. Demographic and clinical characteristics data were analyzed. The multivariate logistic regression model was used to determine the association between T2DM and PDW in PLC patients.

**Results** Of the total 387 patients, 105 (27.1%) cases were diagnosed with T2DM, the mean hemoglobin was (113.7 ± 12.8)g/L, the median/interquartile range of PDW was 15.2% (11.1%-17.3%). A statistical difference was found by univariate analysis for the PDW [11.0% (8.6%-12.4%) vs. 16.7% (15.4-18.0%),  $P=0.037$ ]. The two groups, with a statistical difference (OR=0.437, 95%CI: 0.236-0.638,  $P=0.04$ ) was found by the multivariate analysis, after controlling the age, HBV infection, hemoglobin.

**Conclusions** PLC patients with T2DM have obviously decreased PDW, compared with those without T2DM, which is modified by other factors.

**IDDF2020-ABS-0052 CLINICAL SIGNIFICANCE OF THE SERUM LEPTIN LEVELS OF HEPATITIS C PATIENTS AND THE BLOOD LIPID LEVELS DETECTION**

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10.1136/gutjnl-2020-IDDF.138

**Background** To investigate the correlation between the serum leptin levels and blood lipids levels detection in patients with hepatitis C.

**Methods** 118 patients with hepatitis C in our hospital were randomly selected as the experimental group, while 128 cases of the healthy check-up as the control group. The serum leptin levels and blood lipids levels of all the subjects were detected, and their results were statistically analyzed.

**Results** The average results of all the levels in the experimental groups were higher than that those of the control group. Serum leptin was increased significantly in patients with hepatitis C compared with the healthy controls (23.17 ± 6.46) ng/ml vs (5.47 ± 2.71) ng/ml,  $P=0.01$ . TC in the hepatitis C group increased significantly compared with that in the control group, which was of significant difference ( $P=0.01$ ); HDL-C decreased more obviously in the hepatitis C group, which was of statistical difference ( $P=0.01$ ).

**Conclusions** Through the comprehensive indexes of the serum leptin levels and the combined detection of blood lipid in patients with Hepatitis C liver disease, it can accurately reflect the severity of the hepatitis C liver disease, and it is of guidance significance in clinical diagnosis and treatment.