Abstract IDDF2019-ABS-0306 Figure 1

IDDF2019-ABS-0333 OPTIMAL DRUG ADMINISTRATION MANNER WOULD RESCUE PARTIAL VIROLOGICAL RESPONSE IN CHRONIC HEPATITIS B PATIENTS WITH ENTECAVIR OR TENOFOVIR TREATMENT

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Background Entecavir (ETV) and Tenofovir (TDF) are recommended as the first-line antiviral oral drugs in chronic hepatitis B (CHB) patients owing to their excellent antiviral efficacy and high barrier to resistance. But not all CHB patients could obtain complete virological response (CVR) and part of them just achieved partial virological response (PVR) after 24-week ETV/TDF therapies, and the exact mechanisms remain unclear. This study aims to investigate factors associated with PVR and whether the manner of drug administration affects the antiviral efficacy of ETV/TDF therapy.

Methods This was a retrospective study performed in 518 patients. All patients were divided into CVR or PVR group according to their virological response following 24-week therapy. Demographic and clinical characteristics were compared between patients with CVR and PVR. Factors associated with PVR to ETV/TDF monotherapy were calculated. Patients with PVR were further grouped owing to whether adjusting the manner of ETV/TDF administration and therapeutic responses, including virological response, biochemical response and serological response, were evaluated.

Results Total of 518 ETV/TDF-treated naive patients were enrolled, including 229 (44.21%) patients with CVR and 289 (55.79%) patients with PVR after 6-month ETV/TDF therapies. Suboptimal way of drug administration (HR 77.511, $P = 0.000$), positive-HBeAg (HR 3.191, $P = 0.000$) and ETV treatment (HR 2.537, $P = 0.001$) were identified as independent risk factors for patients with PVR. Among patients with

PVR, 213 patients were in the adjusted group and 76 were in the unadjusted group, respectively. The baseline serum HBV DNA levels in the adjusted group were significantly higher than those in the unadjusted group (3.49 ± 0.61 vs 3.21 ± 0.50 log₁₀ IU/mL, $P = 0.000$). The rates of CVR (78.9% [168/213] vs 31.6% [24/76], $P < 0.001$) and ALT normalization (88.7% [189/213] vs 68.4% [52/76], $P < 0.001$) in adjusted group were both higher than those in unadjusted group following prolonged 6-month therapy.

Conclusions The manner of drug administration is an important factor influencing efficacy to ETV/TDF therapies, and optimal drug administration manner can help to increase antiviral efficacy and rescue patients with PVR.

IDDF2019-ABS-0335 DISTRIBUTION AND FACTORS ASSOCIATED WITH SERUM HBV PREGENOMIC RNA LEVELS IN CHRONIC HEPATITIS B PATIENTS

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Background The present study aimed to study the correlations of serum HBV pgRNA with serum HBsAg and HBcrAg, and further investigate the possible influencing factors of serum HBV pgRNA levels in a large cohort of Chinese CHB patients.

Methods This was a retrospective cohort study consisting of 204 outpatients who visited our hepatitis clinic between January 2009 and December 2010. Serum levels of HBV pgRNA, HBsAg and HBcrAg were quantitatively measured in frozen blood samples.

Results In this cohort, the median serum HBV pgRNA level was 4.12 log₁₀ copies/mL and 29.4% (60/204) of them had serum HBV pgRNA under low limit of detection (LLD) (<500 copies/mL); and the percentage of patients with serum HBV

pgRNA under LLD in HBeAg-positive patients was significantly lower than that in HBeAg-negative patients (15.75% [23/46] *vs.* 77.59% [45/58], $P < 0.001$). Overall, serum HBV pgRNA strongly correlated with HBcrAg ($r = 0.760$, $P < 0.001$), and moderately correlated with HBV DNA ($r = 0.663$, $P < 0.001$) and HBsAg ($r = 0.670$, $P < 0.001$). As compared to HBsAg and HBV DNA, only HBcrAg showed stable correlation with serum HBV pgRNA both in HBeAg-positive and HBeAg-negative patients. Multivariate logistic regression analysis showed that only HBcrAg was independently associated with serum HBV pgRNA below LLD (OR: 2.900, $P = 0.000$) (AUROC = 0.944, cut-off value = 6.60 log₁₀ U/mL).

Conclusions Serum HBV pgRNA level differed between HBeAg-positive and HBeAg-negative patients; and it had a better and more stable correlation with serum HBcrAg than serum HBV DNA and HBsAg, irrespective of HBeAg status. Serum HBcrAg was an independent predictor of serum HBV pgRNA below LLD.

IDDF2019-ABS-0340

THE SPONTANEOUS SYMPTOMATIC ACUTE EXACERBATION OF CHRONIC HEPATITIS B (CHBAE) – CLINICAL PROFILE AND OUTCOMES WITH EARLY ANTI-VIRAL THERAPY

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Background Spontaneous severe symptomatic reactivation of chronic hepatitis B (CHBAE) has high mortality once patient decompensates. The aim of the study was to evaluate the outcome with early anti-viral therapy (AVT) in CHBAE.

Methods Consecutive adult patients having CHBAE seen at the Department of Gastroenterology, G.I.P.M.E.R. New Delhi,

India were enrolled in the study. CHBAE severity was classified on basis of clinical features, total bilirubin & prolongation of prothrombin time as mild (Bil 2–5 mg/dl, PT <3 secs), moderate (Bil >5–15 mg/dl, PT 3–5 secs & severe (Bil >15 mg/dl or PT >5 secs or acute decompensation i.e. ascites & or hepatic encephalopathy). AVT (Tenofovir or Entecavir) was started in moderate & severe disease at the time of initial presentation (i.e. Early AVT). Patients were followed at weekly interval till improvement & then every month till 3 months. The primary outcome was survival at 3 months.

Results 53 patients with confirmed CHBAE finally included. Mean age was 39.8 ± 14.4 yrs. & 38 (72%) were males. Mild CHBAE (n=3), moderate CHBAE (n=21) & severe CHBAE (n=29) cases respectively. Moderate group had (cirrhotic n=03) & median duration of symptoms was 25 days (21–28 days), S. Bil 9.3 mg/dl (7.9–10.9 mg/dl), ALT 1161 IU/ml (608–1395 IU/ml), S. Alb 3.9 gm/dl (3.6–4.4 gm/dl) & HBV DNA 33910 IU/ml (7916–1900000 IU/ml) respectively. Severe CHBAE group had (cirrhotic n=11) & median duration of symptoms was 28 days (21–42 days), S. Bil 19.32 mg/dl (15.4–23.1 mg/dl), ALT 1088 IU/ml (311–1440 IU/ml), S. Alb 3.5 gm/dl (3.1–4.2 gm/dl) & HBV DNA was 174931 IU/ml (7600 – 667601 IU/ml). In moderate CHBAE (Entecavir n=14, Tenofovir n=7) & in severe CHBAE (Entecavir n=24, Tenofovir n=05) were treated respectively. There were 4 (7.5%) deaths in severe CHBAE, all deaths were in cirrhotic patients whom presented with decompensation. (figure 1)

Conclusions Severe CHBAE presents with decompensation of underlying cirrhosis & early initiation of AVT at initial presentation in symptomatic moderate & severe CHBAE prevents clinical deterioration, improves prognosis and reduces mortality.

IDDF2019-ABS-0345

SARCOPENIA IN CIRRHOSIS: A RISK FACTOR FOR HOSPITALIZATIONS AND SHORT TERM MORTALITY

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Background Sarcopenia is an under-recognized complication of cirrhosis which negatively impacts survival and quality of life. There is a paucity of Indian data regarding the prevalence and clinical significance of sarcopenia in cirrhotics. Our aim was to assess the prevalence of sarcopenia and its impact on short-term morbidity and mortality (6 months) of patients with cirrhosis.

Abstract IDDF2019-ABS-0345 Table 1

Characteristics	No sarcopenia (N=82)	Sarcopenia (N=74)	P-value
Ascites	49	64	0.003
Encephalopathy	5	28	0.0001
Re-admission	18	55	0.0001
Death	3	18	0.0002

Abstract IDDF2019-ABS-0340 Figure 1