

TJLB was done using Liver Access and Biopsy set and the histologic findings were reported by an expert pathologist.

**Results:** In our study The Alcoholic Hepatitis Histological Score (AHSS) was significantly higher in the non survivors than in the survivors ( $6.73 \pm 1.59$  vs  $4.14 \pm 1.51$ ,  $p < 0.0001$ ) with the survivors exhibiting more degree of infiltration. Our study reveals that the histologic features do affect a patients outcome.

**Conclusion:** Liver biopsy have a role in disease severity assessment and therapy guidance. Combination of the existing scoring systems may better prognosticate severe AH with greater accuracy and guide treatment.

#### Abstract Id: 406

### PREVALENCE AND CLINICAL OUTCOME IN ADMITTED FEMALE PATIENTS WITH ALCOHOL-RELATED CIRRHOSIS OF LIVER COMPARED TO MALE PATIENTS

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**Background and Aim:** Alcohol is the most common culprit for cirrhosis of the liver in South Asian countries. Female patients are found to develop cirrhosis at a lower dose and a lesser duration of alcohol consumption. We aimed to assess the prevalence and clinical outcomes of female patients with alcohol-related cirrhosis compared to male patients.

**Methods:** This was a single-center retrospective study conducted between April 2021 and January 2024 at a tertiary care referral center after obtaining ethical clearance. All the patients with alcohol-related liver cirrhosis were included. The main parameters assessed were severity of disease, hepatocellular carcinoma (HCC), and short-term in-hospital outcome in the form of duration of hospital stay and mortality. Data analysis was done using STATA.

**Results:** Among 373 alcohol-related cirrhotic patients [mean age:  $53.7 \pm 12.0$  years], 101 (27.1%) were female. The most common presenting complaints were ascites, gastrointestinal bleeding, jaundice, hepatic encephalopathy, and nonspecific complaints in 168 (45.6%), 113 (30.7%), 96 (26.0%), 42 (11.4%), and 13 (3.5%) respectively. Disease severity scores at presentation in female and male patients were CTP ( $10.0 \pm 2.1$  vs  $9.5 \pm 2.2$ ,  $p=0.06$ ), MELD ( $18.7 \pm 7.6$  vs  $18.4 \pm 8.5$ ,  $p=0.76$ ), and MELD-Na ( $20.7 \pm 7.9$  vs  $20.2 \pm 8.3$ ,  $p=0.62$ ). Hepatocellular carcinoma was seen in 1 (0.9%) in female and 11 (4.0%) in male patients ( $p=0.19$ ). In-hospital mortality occurred in 4 (4.0%) and 11 (4.1%) female and male patients respec-

tively ( $p=0.98$ ). Total hospital stays in female and male patients were  $4.4 \pm 2.9$  and  $4.8 \pm 3.9$  days respectively ( $p=0.39$ ). The only predictor of short-term in-hospital mortality was the presence of HCC (OR 14.5, 95% CI: 2.07-101.74,  $p=0.007$ ).

**Conclusion:** More than one-fourth of the patients with alcohol-related liver cirrhosis are female. Female patients with alcohol-related cirrhosis have disease severity, prevalence of HCC, hospital stay, and in-hospital mortality comparable to male patients.

#### Abstract Id: 508

### PLASMA EXCHANGE (PLEX) AND LOW DOSE STEROID IMPROVES QUALITY OF LIFE IN PATIENTS WITH SEVERE ALCOHOLIC HEPATITIS

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**Background and Aim:** Severe alcoholic hepatitis (SAH) being a highly catabolic state, adversely impacts nutrition and general well-being of the patient. PLEX improves survival in these patients. In this study, we aim to assess the baseline nutrition status and improvement in quality of life in SAH patients treated with PLEX and low dose steroid.

**Methods:** We prospectively enrolled SAH patients who underwent PLEX (Sep-23- Apr-24) and analyzed data on nutrition, anthropometry, sarcopenia (muscle mass estimated by bio-impedance), liver frailty index (LFI) and quality of life (Chronic liver disease questionnaire, CLDQ). Interim data of the ongoing study is reported.

**Results:** Twenty-three SAH patients (M: 23; Age:40,27-57 years; median, range; Discriminant function:79, 39-206; MELD score:28,21-43) were treated with centrifugal low-volume PLEX and low dose steroid (PMID:37975044). Eighteen (78%) patients had acute on chronic liver failure (by APASL definition in 17 and EASL definition in 1 patient). At baseline, in-house nutritional prioritizing tool (modified from RFH tool, PMID:32600494) showed severe malnutrition in 8 (35%), moderate in 8(35%) and mild in 7(30%). Corrected BMI ( $22.4, 14.7-31.3$ ), mid-arm muscle circumference (24, 18, 32 cm) and triceps fold thickness (6, 4, 10 mm) was noted. By skeletal muscle mass ( $17.2, 14.4- 21.9$  kg), skeletal muscle index ( $6.06, 5.7- 6.5$  kg/m<sup>2</sup>) and handgrip strength ( $19.4, 10.7- 27.5$ ), all patients were sarcopenic as per EWGSOP (PMID: 30312372)

guidelines. LFI (4.73, 4.6- 6.75) showed 21 patients (91%) were frail. Overall, 1-month mortality was 26% and hospital stay 10(7-15) days. In survivors, baseline pre-PLEX CLDQ total score (100, 76-127) improved to 165 (104-182; p-value <0.001), across all the six domains (abdominal and systemic symptoms, fatigue, worry, emotional function and activity) at follow-up period of 160, 30-270 days. **Conclusion:** Patients with SAH undergoing PLEX were malnourished, sarcopenic and frail with poor well-being. PLEX and low dose steroid, in short-term, significantly improves quality of life in these patients.

#### Abstract Id: 511

### PREDICTORS OF SURVIVAL FOR SEVERE ALCOHOLIC HEPATITIS PATIENTS TREATED WITH LOW VOLUME CENTRIFUGAL PLASMA EXCHANGE AND LOW DOSE STEROID

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**Background and Aim:** Severe alcoholic hepatitis (SAH) patients have increased mortality. Plasma exchange has improved survival among SAH patients. The predictors of response to plasma exchange (PLEX) is unknown.

**Methods:** From prospective PLEX database, we analyzed the data of SAH patients. NIAAA criteria was used for SAH definition and EASL-CLIF definition was used for ACLF. Low volume (0.5 times plasma volume/ session) centrifugal PLEX (cPLEX) with low dose steroid (T. Prednisolone 10 mg/ 20 mg once daily) was the protocol used. We excluded patients with advanced ACLF (ACLF grade 3). Delta bilirubin [(baseline bilirubin- bilirubin after third PLEX)\*100/ baseline bilirubin] was studied as dynamic parameter.

**Results:** Over a 6-year period (2017-2023), there were 72 patients (all males) aged 42.4 (±8.5) years, with MELD score 29.8 (±5.7) and CLIF OF score (COS) 10 (±1). 26 patients had no ACLF, 13 patients had grade1 ACLF and 33 patients grade 2 ACLF. Overall survival estimates were 82% (4.6) at 1 month, 49.3% (5.9) at 3 months and 38% (5.8) at 1 year. On univariate Cox regression, baseline INR, DF score, MELD score, COS and delta bilirubin were predictors of outcome at 1 year. Baseline INR value of < 2.7 and delta decline in bilirubin > 48% predicted favorable outcome. Survival estimates (SE) were as follows for patients based on the above favourable factors: at 90 days, if bilirubin >48% (irrespective of INR) was 100%, if INR <2.7 & bili-

rubin <48% was 54.3 % (8) and if both absent 8.8% (7.8%). Survival estimates at 1 year were with both factors present 75% (12.5), with any one factor present 41% (8), 50% (35) and if both factors absent 6.3% (6.1).

**Conclusion:** Outcome of SAH patients treated with cPLEX can be predicted using baseline INR and delta decline in bilirubin.

#### Abstract Id: 521

### SARCOPENIA, FRAILTY AND GROWTH HORMONE-INSULIN LIKE GROWTH FACTOR AXIS AMONG DECOMPENSATED AND ALCOHOL-ASSOCIATED HEPATITIS PATIENTS

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**Background-Aim:** Sarcopenia, frailty, and GH-IGF-1 axis impairment in alcohol-associated hepatitis (AH) and decompensated cirrhosis (ALD-DC) remain elusive. This study examines these factors in both groups.

**Methods:** Patients with ALD-DC and AH were enrolled from a tertiary-care institute between 2023-24. Sarcopenia was assessed via DEXA/CT-SMI, frailty via liver frailty-index and GH-IGF1 levels through immunoassays.

**Results:** 176 patients were recruited (98% males, median age-44) exhibiting ascites (grade-I: 21.6%, grade-II: 27.8%, grade-III: 46%), hepatic-encephalopathy (grade-I: 4%, grade-II: 4.5%) and CTP of 9 (8-10.3). Median MELD, GH and IGF-1 levels were 17.1, 3.92 and 37.7 ng/ml. Sarcopenia and frailty were noted in 68% and 30.2% patients. Patients with AH had worse CTP and MELD scores (p=0.001), higher GH levels (p=0.027) and lower IGF-1 (p=0.022) compared to ALD-DC patients. Frailty was more frequent in AH patients (42.5% vs. 18.3%) (p=0.001). Lower IGF-1 was linked with sarcopenia (p=0.007) and frailty (p=0.011). IGF-1 declined with worsening CTP classes [CTP-A (52.4), CTP-B (39.1), CTP-C (32.8) (p=0.003)]. Linear regression revealed negative association of CTP score ( $\hat{r}^2=-1.05$ , p=0.001) and MELD ( $\hat{r}^2=-3.3$ , p=0.001) with log-IGF1. Lower baseline IGF1 levels were observed in 90-day non-survivors compared to survivors among both AH [25 vs 37.20, p=0.015] and DC patients [21.10 vs 41, p=0.005]. Cox-regression identified IGF-1 as a significant predictor of 90-day mortality in AH (HR: 0.94, p=0.033) and DC-