Utility of Pre and Post Treatment Alpha-Fetoprotein in the Prognosis of Hepatocellular Carcinoma Treated with Ultrasound-Guided Percutaneous Radiofrequency Ablation

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Background Post-treatment alpha-fetoprotein (AFP) response has been reported to be associated with prognosis of hepatocellular carcinoma (HCC). We aimed to determine whether pre- and post-treatment AFP are associated with survival for HCC patients undergoing radiofrequency ablation (RFA).

Methods RFA was performed on 166 index HCC patients from 2007 to 2018. Post-treatment AFP was monitored at 1-, 3- and 6-months and percentage AFP responses were computed from pre-treatment AFP. Overall Survival (OS) was estimated using Kaplan-Meier; log-rank and Cox regression analysis of predictors were analyzed.

Results Pre-treatment AFP levels ≥10ng/ml, >100ng/ml and ≥1000ng/ml were observed in 55.1% (92/166), 31.1% (52/166) and 9.6% (16/166), respectively. Patients with pre-treatment AFP ≤10ng/ml had poorer OS compared to AFP<10ng/ml (1-, 3- and 5-year: 77.3%, 50.7%, 23.3% vs 93.1%, 70.1%, 42.2%; p=0.003). In those with normal post-treatment AFP, AFP response <50% at 6 months was a predictor of OS (1-, 3- and 5-year: 96.4%, 84.4%, 62.8%; p=0.014). In those with high post-treatment AFP, AFP response <50% at 1 month (p=0.009) and 3 months (p=0.002) were predictors of OS. Furthermore, normal AFP at any time during 1-, 3- or 6-months post treatment with RFA were associated with better OS (p<0.001). When pre- and post-treatment AFP were
analyzed, pre-treatment AFP<10ng/ml and post-treatment AFP response≥50% at 1 month yielded the best estimated 5-year survival (p=0.002). Pre-treatment AFP<10ng/ml and post-treatment AFP response/C21 50% at 1 month yielded the best estimated 5-year survival (p=0.002)

Conclusions Pre-treatment AFP<10ng/ml, 6-months post-treatment AFP response/C21 50% with normal AFP and 1- and 3-months post-treatment AFP response/C21 50% with high AFP were predictors of better OS. AFP<10ng/mL at any time during 1-, 3- or 6-months after RFA was an important predictor of better prognosis. The best prognosticator for OS was a patient with pre-treatment AFP<10ng/ml and post-treatment AFP response/C21 50% at 1 month.

IDDF2021-ABS-0089 PRIMARY NORFLOXACIN PROPHYLAXIS REDUCES THE INCIDENCE OF INFECTIONS IN SEVERE ALCOHOLIC HEPATITIS-A DOUBLE-BLIND, RANDOMIZED CONTROLLED STUDY

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Background Steroid therapy is the standard of care for severe alcoholic hepatitis (sAH) at most centres. However, steroids are associated with an increased risk of infections. Therefore, we aimed to compare the outcomes of patients receiving concomitant norfloxacin (NFX) with steroids in patients with sAH.

Methods In this double-blind, randomized study, acute-on-chronic liver failure (ACLF) patients without sepsis, hepatic encephalopathy, or SBP were assigned to receive oral NFX 400mg or matched placebo (PBO) once daily for 30 days along with standard medical therapy. 143 ACLF patients were included (CTRI/2019/10/021548). On subgroup analysis, 20 in the NFX group and 13 patients in the PBO group received concomitant steroid therapy for sAH. The primary objective was to assess the incidence of infections at days 30, 90, and the secondary was to evaluate the transplant-free survival (TFS) at days 30, 90.

Results Baseline characteristics were similar in both the groups (MELD-NFX-27.8±3.79 vs. PBO-29.62±4.66; P=0.229). The incidence of infection was lower with NFX (10%) than PBO (38.5%) at day 30 (P=0.066). The incidence of infection at day 90 was lower with NFX (30%) than PBO (69.2%) (P=0.027) (IDDF2021-ABS-0089 Figure 1. Kaplan Meier analysis of infection incidence at days 30, 60 and 90). TFS was similar in both groups at day 30 (NFX-85% vs. PBO-77%; Log-Rank test: P=0.524). However, TFS at day 90 was better with NFX (85%) than placebo (53.8%) (Log-Rank test: P=0.059). The most common source of infection was the urinary tract (NFX - 3 vs. Placebo-4). E. coli was the commonly isolated organism in both groups. Candida albicans were isolated in two patients in NFX group, while none in the PBO group developed fungal infection. Sepsis was the common cause of mortality (NFX-2; PBO-4). Further, one patient in NFX group succumbed to post-TIPS liver failure (for variceal bleed). There were no drug-related adverse events in this subgroup of patients.

Conclusions Primary norfloxacin prophylaxis is safe and effective in reducing infections in patients with sAH receiving steroid therapy.

IDDF2021-ABS-0092 A DIAGNOSTIC TEST META-ANALYSIS EVALUATING THE PERFORMANCE OF IMAGING-BASED AND BLOOD BIOMARKER-BASED ASSESSMENT TOOLS FOR FIBROSIS AFTER LIVER TRANSPLANTATION

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Background Assessing fibrosis after liver transplant (LT) remains a core concern and can suggest the presence of de novo nonalcoholic fatty liver disease or recurrence after