FRI-018 Presepsin (soluble CD14 subtype) levels in cirrhotic patients with bacterial infections and/or portal hypertension related bleeding presented with or without acute kidney injury

I.S. Elefsiniotis1 , S. Tsakiris1 , G. Barla1 , A. Tasovasili1 , I. Stathopoulou1 , K. Tampouratzi1 , E. Evangelidou1 , D. Vrachatis1 , C. Mavrogiannis1 .

1 Internal Medicine-Hepatogastroenterology, General and Oncology Hospital of Kifisia "Agioi Anargyroi",

National and Kapodistrian University of Athens, Athens, Greece E-mail: ielefs@nurs.uoa.gr

Background and Aims: Bacterial infections (BI) are a common complication in patients with liver cirrhosis (LC). Serum presepsin has recently aroused as a potential biomarker for sepsis diagnosis. In this study we evaluated serum presepsin levels in LC patients, with or without documented BI and/or portal hypertension related bleeding (PHRB) presented with or without acute kidney injury (AKI).

Methods: We prospectively evaluated presepsin levels (PATHFAST chemiluminescent enzyme immunoassay), in 108 consecutive presenting uncomplicated outpatient LC patients (53 decompensated, 37 Child-Pugh B/C, 50 with MELD score ≥10), without documented BI. Twenty of them re-evaluated during their hospitalization for documented BI (n = 18) with (6/18) or without (12/18) PHRB or with PHRB without documented BI (n = 2). Ten patients presented with AKI (according to ICA-AKI definition, Angeli P et al. J Hepatol 2015) resulting in fatal outcome in all of them.

Results: Mean baseline presepsin levels were 440 pg/mL. Higher levels were observed in the Child-Pugh B/C group compared to the Child-Pugh A group (mean: 674 vs 318 pg/mL, $p < 0.0001$). Additionally the mean baseline presepsin levels of patients with MELD score ≥10 were also significantly higher than the corresponding ones of patients with MELD score < 0.0001). Significantly higher mean presepsin levels (1,292 pg/mL) were observed in admitted patients with event compared to their baseline values (725 pg/mL, $p < 0.0001$).

Patients who developed AKI (10/20, 50%) presented with significantly higher baseline (936 vs 514 pg/mL, $p = 0.035$) as well as on event (1,827 vs 1,049 pg/mL, $p = 0.019$) presepsin levels compared to those who did not develop AKI. In multivariate analysis both baseline MELD score ≥15 ($p < 0.0001$) as well as baseline presepsin levels ≥725 pg/mL ($p = 0.029$) significantly predicted event needed hospitalization, adjusted for age and gender of the cirrhotic population.

Conclusions: Cirrhotic patients presented with BI and/or PHRB, especially those who developed AKI, exhibited significantly higher presepsin levels than their baseline values. Baseline MELD and presepsin levels could predict patients at risk for a complicated event

http://www.journal-of-hepatology.eu/article/S0168-8278(17)31096-6/pdf