#16 - PENTOXIFYLLINE USE IN PATIENTS WITH ALCOHOL-ASSOCIATED HEPATITIS ADMITTED WITH ACUTE KIDNEY INJURY COULD DECREASE SURVIVAL: A GLOBAL STUDY

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BACKGROUND: Alcohol-associated hepatitis (AH) is a severe entity with a mortality of up to 30 at 1 month. Pentoxifylline combined with steroids has not demonstrated benefits in severe AH. Some studies have suggested that pentoxifylline may be beneficial in the subgroup of patients with acute kidney injury (AKI) and AH. However, there is no solid evidence of its benefit in mortality in this setting.

AIM: Determine the benefit of the use of pentoxifylline in patients with severe AH and AKI.

METHODS: Global retrospective cohort study, including patients with severe AH and AKI at admission (2009–2019). We used competing-risk models with liver transplantation as a competing risk to assess the potential effect of pentoxifylline.

RESULTS: We included 655 patients with severe AH and AKI (30 centers,10 countries). Median age was 48±11.6 years, 26.2% were females, and 52.5% were Caucasian. Around 68.7% of the patients had history of cirrhosis, and 6.6% underwent liver transplantation. MELD score on admission was 34 [15–74]. 43.2% of the patients used corticosteroids, while only 6.9% used pentoxifylline during hospitalization. In the univariate analysis, the variables independently associated with mortality were female sex (sHR0.740; 95%IC:0.577–0.948; p=0.018), MELD (sHR1.034; 95%IC: 1.020–1048; p<0.001), MELD 3.0 (sHR1.034, 95%IC:1.018–1.049, p<0.001), Maddrey's discriminant function (sHR1.005, 95%IC:1.003–1.008, p<0.001), serum albumin at admission (sHR0.756; 95%IC:0.642–0.890; p=0.001), bilirubin at admission (sHR 1.011; 95%IC:1.003–1.019, p=0.006), serum creatinine (sHR1.083; 95%IC:1.028–1.140, p=0.002) and pentoxifylline use (sHR 1.531, 95%IC:1.107–2.119; p=0.010)(**Table**). In the multivariate-adjusted model, the use of pentoxifylline was associated with increased mortality (sHR1.620, 95%IC:1.190–2.204; p=0.002).

CONCLUSIONS: The use of pentoxifylline has no benefit in terms of mortality and could decrease survival in patients with AH and AKI.

Table.- Univariate and multivariate competing-risk analyses. Mortality is the primary event, and liver transplant is the competing risk.

	Univariate analysis			Multivariate analysis		
Variables	**sHR**	**95% CI**	**p-value**	**sHR**	**95% CI**	**p-value**
Age (years)	1.005	0.996–1.014	0.231	1.013	1.003–1.023	0.006
Sex (Female)	0.740	0.577–0.948	0.018	0.802	0.618–1.040	0.097
MELD	1.034	1.020–1048	< 0.001	1.043	1.021–1.065	< 0.001
MELD 3.0	1.034	1.018–1.049	< 0.001	-		
mDF	1.005	1.003–1.008	< 0.001	-		
Cirrhosis	1.100	0.821–1.473	0.522	-		
Corticosteroids use	1.051	0.845–1.308	0.650	1.058	0.842–1.329	0.628
Albumin at admission	0.756	0.642–0.890	0.001	-		
Bilirubin at admission	1.011	1.003–1.019	0.006	-		
Serum creatinine	1.083	1.028–1.140	0.002	0.973	0.892–1.329	0.628
Pentoxifylline use	1.531	1.107–2.119	0.010	1.620	1.190–2.204	0.002

sHR: Subdistribution Hazard ratio; mDF: Maddrey's discriminant function.