Abstract: P1115

Predictor factors of rehospitalization and mortality in acute heart failure

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Introduction: Acute heart failure (AHF) is a life-threatening condition requiring immediate diagnosis and initiation of treatment. The first months after an AHF episode are characterised by high readmission and mortality rates.

Objective: Evaluation of predictor factors (PF) of in-hospital (IH) mortality (M), and 6-months (6m) and 1-year (1y) rehospitalization (RH) and M in patients admitted with AHF.

Material and methods: Single center retrospective analysis of P data admitted with AHF between 2001-2017. Data was collected regarding clinical, laboratorial and echocardiographic parameters to determine PF of stablished endpoints.

Results: 465 P were reviewed, age 67.9±12.2 years, 69.9% males. 64% had hypertension, 39.4% diabetes and 34.4% dyslipidaemia. 57.3% had a de novo diagnosis. Total IH M was 6.7%. At univariate analysis, PF of IH M were inotropic use (odds ratio (OR) 10.258, p <0.001, confidence interval (CI) 3.859-27.265), clinical profile at admission (OR 7.274, p <0.001, CI 3.314-15.967), systolic blood pressure (SBP) (OR 0.975, p <0.001, CI 0.962-0.989), urea (OR 1.102, p <0.001, CI 1.006-1.019), age (OR 1.067, p 0.001, CI 1.026-1.110), brain natriuretic peptide (BNP) dosage (OR 1, p 0.002, CI 1.003-1.009), haemoglobin (OR 0.810, p 0.029, CI 0.671-0.978) and creatinine level (OR 1.019, p 0.047, CI 1.002-1.038). At multivariate analysis, independent PF of IH M were profile at admission (p<0.001), creatinine (p<0.001), BNP (p<0.001), inotropic (p 0.002) and urea (p0 0.021). Concerning to 6m M, at univariate analysis, the PF were urea (OR 1.010, p 0.001, CI 1.004-1.016) and age (OR 1.036, p 0.008, CI 1.010-1.069). At multivariate analysis, they both showed to be independent PF of 6m M (urea p <0.001 and age p 0.007). Concerning to 1y M, the only PF was urea (OR 1.009, p 0.039, CI 1.002-10.18). This was also the only PF of 6m RH (OR 1.008, p 0.006, CI 1.002-1.013). The only PF for 1y RH was ejection fraction (OR 0.971, p 0.018, CI 0.947-0.995).

Conclusion: In this study, and accordingly with larger studies, hemodynamic and analytical profile at admission were important factors of prognosis.