

## SYSTOLIC BLOOD PRESSURE IS A VALID MARKER OF IN-HOSPITAL SURVIVAL IN ACUTE CARDIOGENIC PULMONARY EDEMA - ANALYSIS OF 1.397 PATIENTS

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Bearing in mind the prevalence and dramatic clinical picture of acute cardiogenic pulmonary edema (ACPE), as well as impermissibly great early and late mortality, the goal of this paper was to examine if blood pressure (BP) is a predictor of in-hospital outcomes in ACPE. The analysis includes 1.397 patients with ACPE, treated at the Department for Cardiovascular Diseases, Clinical center, Niš, from 1993-2005. According to systolic blood pressure (SBP) on admission, patients were divided into three groups: low SBP (L; <100mmHg), normal SBP (N; 100-139 mmHg) and high BP (H; ≥140mmHg). In-hospital mortality was significantly higher in the subgroup of L vs N (62.75% vs 15.79%,  $p < 0.001$ ), as well as in the subgroup N vs H (15.79% compared to 7.26%;  $p < 0.0001$ ).

Serum creatinine concentration was significantly higher in the subgroup of L vs N; the level of Na<sup>+</sup>, the thickness of the interventricular septum in diastole and the prevalence of preserved LV contractile function were higher in the subgroup H compared to N; the concentration of K<sup>+</sup> in serum was higher in subgroup L vs H and AF was more represented in the L subset as compared with the N subset.

Therefore, the systolic BP is an important predictor of in-hospital survival, not only in AMI, but in acute cardiogenic pulmonary edema, too. In the study including the largest homogeneous group of patients with acute cardiogenic pulmonary edema without AMI (1.397 persons), we found that patients with hypotension (systolic BP < 100 mmHg) died in hospital about 9 times more often (62.75% vs 7.26%) than patients with elevated systolic BP on admission. *Acta Medica Medianae* 2015;54(3):45-50.

**Key words:** acute cardiogenic pulmonary edema, blood pressure, sodium, potassium, prognosis