GW23-e2705 **THE INFLUENCE OF ADMISSION HEART RATE ON THE CLINICAL COURSE AND SHORT-TERM OUTCOME OF THE DISEASE IN PATIENTS WITH Q-MYOCARDIAL INFARCTION LEFT VENTRICULAR AND EARLY SYSTOLIC DYSFUNCTION**

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Objectives The purpose of the study was to assess the influence of admission heart rate (HR) on the clinical course and immediate outcomes in patients with Q-myocardial infarction (MI) with left ventricular (LV) ejection fraction (EF) <45%.

Methods Retrospective analysis was conducted of 680 patients with Q-wave MI, LV EF <45% and Killip class I-III at admission. According to the admission HR the patients were divided into two groups: 1st (n=154), ≤70 bpm, and 2nd (n=526), >70 bpm. End-diastolic (EDI), end-systolic (ESI), anteroposterior size of left atrial (LA) and anteroposterior size of right ventricle (RV), end-diastolic posterior wall (PW), interventricular septum (IVS) thicknesses and independent predictors of in-hospital mortality were analysed.

Results Patients of both groups did not differ by age, sex, incidence of such diseases in anamnesis as hypertension, MI, unstable angina and stable angina, as well as the frequency of smoking and the localisation of MI (all p>0.05). In the absence of significant differences in average values of systolic and diastolic blood pressure in patients of 1st and 2nd groups, the occurrences of admission Killip class II–III were respectively 19.5 and 36.5% (p <0.001), frequency of increase of Killip class by one class in hospital—respectively 15.6 and 26.6% (p<0.01), in-hospital mortality —respectively 18.8 and 30.8% (p<0.01). The study of LV systolic function parameters in patients of 1st and 2nd groups in the first 3 days registered such results: ESI—respectively (45.8±1.3) and (50.7±0.7) ml/m^2 (p<0.0 1), EDI—respectively (75.3±1.9) and (81.9±0.9) ml/m^2 (p<0.01), LV EF—respectively (39.8±0.4) and (37.5±0.3) % (p<0.01), LA size—respectively (3.71±0.05) and (3.85±0.03) cm (p<0.01), PW thickness—respectively (1.01±0.01) and (1.02±0.0 1) cm (p>0.05), and IVS thickness—(1.02±0.01) and (1.01±0.01) cm (p>0.05). In multivariate analysis, admission HR>70 bpm was an independent from Killip class II-III predictor of unfavourable outcome and was associated with 2.16-fold increase of in-hospital mortality (OR=2.158, 95% CI 1.313 to 3.548, p=0.002).

Conclusions In patients with Q-MI and early LV systolic dysfunction, admission heart rate >70 bpm is a significant independent predictor of in-hospital mortality and early LV remodelling. Admission HR >70 bpm in patients with Q-wave MI and LV EF <45% contributes to significantly more frequent in comparison with HR ≤70 bpm increase of Killip class by one class or more, but has no effect on the incidence of potentially fatal ventricular arrhythmias and recurrent MI.