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THE PREVALENCE AND PROGNOSTIC VALUE OF LIVER FUNCTION ABNORMALITIES IN PATIENTS WITH CHRONIC SYSTOLIC HEART FAILUREYu Shengbo *Renmin Hospital of Wuhan University*

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Background The prevalence and prognostic value of liver function abnormalities in patients with chronic systolic heart failure (HF) have not been systematically evaluated.

Methods and results 16 681 in-hospital patients from 12 hospital of Hubei province, China, with diagnosis of chronic systolic HF and LVEF<50% were enrolled. All patients were followed up by telephone contact. Patients were divided into death and survival groups according to the result of follow-up. Over media 3 years follow-up, 6453 (38.69%) patients died. The prevalence of liver function abnormality was 71.94% (12001/16681). The elevations of direct bilirubin, γ -glutamyl- transferase and alanine aminotransferase were the most common which accounts 33.37% (4863/14574), 32.51% (4337/13341) and 30.12% (5024/16681), respectively. The abnormality of alkaline phosphatase was less, the elevation and declination of which accounts 3.82% (474/12397) and 4.51% (559/12397) respectively. The prevalence of low albumin and total bilirubin elevation was 23.24% (3408/14664) and 19.37% (3231/16681). Low albumin (HR 0.411, 95% CI 0.225 to 0.752; $p=0.004$) and elevated direct bilirubin (HR 1.785, 95% CI 1.625 to 1.986; $p=0.037$), total bilirubin (HR 1.358, 95% CI 1.034 to 1.783; $p=0.028$) were determinated as the independent risk factors of total mortality. Study revealed correlations of LVEF with direct bilirubin ($r=-0.235$, $p<0.0001$), total bilirubin ($r=-0.209$, $p<0.0001$), albumin ($r=0.107$, $p<0.0001$) and right ventricular end-diastolic diameter (RVDD) with direct bilirubin ($r=0.149$, $p<0.0001$), total bilirubin ($r=0.154$, $p<0.0001$), albumin ($r=-0.086$, $p<0.0001$).