NYHA functional Class III: 9.8±0.5; NYHA functional Class IV: 12.4±0.6 ng/ml (p<0.01). Similarly, plasma BNP levels were significantly increased in accordance with the NYHA class. Plasma adropin levels were correlated positively with BNP (r=0.723, p<0.001), interleukin 6 (IL-6) (r=0.326, p=0.007) and body mass index (BMI) (r=0.295, p=0.014), and negatively with left ventricular ejection fraction (LVEF) (r=−0.710, p<0.001).

Conclusion Plasma adropin levels were significantly increased according to the severity of HF, and BNP and BMI had independent impact on the plasma adropin level. These findings suggest that the augmented release of adropin may be involved in the pathogenesis of HF and further study is necessary to explain the precise role of adropin in HF.

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ELEVATED PLASMA LEVELS OF ADROPIN IN HEART FAILURE PATIENTS

Even Lin Wen, Gu Xiaosong, Qin Yong-Wen, Zheng Xing *Changhai Hospital, Second Military Medical University*

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Background Recent studies have suggested that a higher body mass index (BMI) is associated with an improved prognosis in heart failure (HF). Adropin is a recently identified protein that has been implicated in the maintenance of energy homeostasis. In the present study, we investigated plasma adropin levels in patients with HF and evaluated the relationship between the levels and the severity of HF.

Methods and results The study group comprised 56 patients with HF and 20 control subjects, who were divided into four subgroups according to New York Heart Association (NYHA) functional classification. Plasma levels of adropin, brain natriuretic peptide (BNP) and cardiac haemodynamics were determined. Plasma adropin levels were significantly increased according to the severity of NYHA class in the patients with HF; control: 6.0±0.3; NYHA functional Class II: 7.6±0.4;