

## Predictive factors for longer length of hospital stay in patients with heart failure

To the Editor,

I have read the article by Kato et al. (1) entitled "Higher diuretic dosing within the first 72 h is predictive of longer length of stay in patients with acute heart failure" which was published in *Anatol J Cardiol* 2018; 20: 110-6, with great interest. In their study, authors reported that higher diuretic dosing in the first 72 h of hospitalization was an independent predictor of longer length of hospital stay in patients with acute heart failure. In addition, they concluded that there could be important predictors of the length of hospital stay that were not included in their study. Beside this, they reported that laboratory data of patients, including serum sodium level and cardiac troponin values, were recorded on admission and during the first 72 h of hospitalization (1). I would like to emphasize some important points about this well-written study.

It has been demonstrated that cardiac troponin is an important marker for the prognosis of acute heart failure. In previous studies, it has been shown that an elevated cardiac troponin level on admission has been associated with increased length of hospital stay (2, 3). Moreover, hyponatremia is a common electrolyte disorder in patients with heart failure. It has been reported that patients admitted with hyponatremia show increased hospital mortality

and rates of longer hospital stay (4). Therefore, I wish to ask the authors why they did not mention about serum sodium levels and cardiac troponin values of patients in baseline characteristics and did not use these parameters in the statistical evaluation, although they possessed the data for these parameters.

Further, the presence of edema at admission and the change in weight during hospitalization are major factors influencing the length of hospital stay in patients with heart failure (5). I believe that the aforementioned factors should be considered to verify the predictive value of higher diuretic dosing within the first 72 h on hospital stay in patients with acute heart failure.

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### References

1. Kato H, Fisher P, Rizk D. Higher diuretic dosing within the first 72 h is predictive of longer length of stay in patients with acute heart failure. *Anatol J Cardiol* 2018; 20: 110-6.
2. Parenti N, Bartolacci S, Carle F, Angelo F. Cardiac troponin I as prognostic marker in heart failure patients discharged from emergency department. *Intern Emerg Med* 2008; 3: 43-7.
3. La Vecchia L, Mezzena G, Zanolli L, Paccanaro M, Varotto L, Bonanno C, et al. Cardiac troponin I as diagnostic and prognostic marker in severe heart failure. *J Heart Lung Transplant* 2000; 19: 644-52.
4. Ali K, Workicho A, Gudina EK. Hyponatremia in patients hospitalized with heart failure: a condition often overlooked in low-income settings. *Int J Gen Med* 2016; 9: 267-73.
5. Wright SP, Verouhis D, Gamble G, Swedberg K, Sharpe N, Doughty RN. Factors influencing the length of hospital stay of patients with heart failure. *Eur J Heart Fail* 2003; 5: 201-9.

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