



CORRESPONDENCE

Plasma B-type natriuretic peptide in predicting outcomes of elective coronary artery bypass surgery (Reply)



Dear Dr. Balta et al.:

Thank you for your comments about the article "Plasma B-type natriuretic peptide in predicting outcomes of elective coronary artery bypass surgery". The B-type natriuretic peptide (BNP) is a neurohormone that is mainly secreted from the cardiac left and right ventricles by increasing ventricular wall stress and volume expansion. As you mentioned, high levels of plasma natriuretic peptide and N-terminal proBNP (NT-proBNP) have been reported in many conditions, such as female sex, old age, impaired renal function, hypertension, pulmonary hypertension, and heart failure [1,2]. However, the inclusion criterion for the article was elective coronary artery bypass surgery. Patients reported in the article were in more stable condition. Bad conditions, such as sepsis, liver cirrhosis, hyperthyroidism, interstitial lung disease, pulmonary embolism, and uremia were excluded from this study. This study demonstrated that old age, impaired renal function, and postoperative day1 BNP and NT-proBNP could influence prolonged intensive care unit stay and hospitalization [3]. However, the correlation became insignificant after adjusting for age, sex, renal function, and left ventricular function. Advanced age revealed good correlations with prolonged intensive care unit stay and hospitalization in both univariate and multivariate logistic regression models. In clinical practice, we agree with you that one should keep in mind that BNP alone without other predictive markers may not give exact information to clinicians about prognostic indications.

References

- [1] Valli N, Gobinet A, Bordenave L. Review of 10 years of the clinical use of brain natriuretic peptide in cardiology. *J Lab Clin Med* 1999;134:437–44.

- [2] McDonagh TA, Robb SD, Murdoch DR, Morton JJ, Ford I, Morrison CE, et al. Biochemical detection of left ventricular systolic dysfunction. *Lancet* 1998;351:9–13.
- [3] Chen TH, Lin CL, Shih JM, Shih YM, Chen CH, Chang ML, et al. Plasma B-type natriuretic peptide in predicting outcomes of elective coronary artery bypass surgery. *Kaohsiung J Med Sci* 2013;29:254–8.

Thay-Hsiung Chen
Division of Cardiac Surgery, Cathay General Hospital,
Taipei, Taiwan

Ching-Ling Lin
Division of Endocrinology, Cathay General Hospital,
Taipei, Taiwan

Joseph Jaey-Ming Shih
James Yao-Ming Shih
Division of Cardiac Surgery, Cathay General Hospital,
Taipei, Taiwan

Chung-Huo Chen
Mei-Ling Chang
Chih-Hui Chin*
Division of Cardiology, Cathay General Hospital,
Taipei, Taiwan

*Corresponding author. Division of Cardiology, Department of Medicine, Cathay General Hospital, 280, Section 4, Ren-Ai Road, 106 Taipei, Taiwan.

E-mail address: chchin@cgh.org.tw (C.-H. Chin)

