



Letter to the Editor

NT-pro-BNP: A promising predictor of stroke risk after transient ischemic attack

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Dear Editor,

We have read a clinical study entitled “NT-pro-BNP: A novel predictor of stroke risk after transient ischemic attack” [1]. This study revealed that NT-pro-BNP serum levels were higher in transient ischemic attack (TIA) patients who suffered a stroke, and the greater levels of NT-pro-BNP, the earlier the stroke happened, regardless of the etiopathogenesis of the TIA.

NT-pro-BNP is an inactive and stable amino acid fragment, secreted from ventricular cardiac myocytes, which is the response to left ventricular strain or ischemia and has been found to be an important biomarker for left ventricular systolic dysfunction and left ventricular stress [2]. Studies showed that NT-pro-BNP, associated with age, renal function and inflammation, can not only act as predictive biomarkers of cardiac diseases, but also cerebrovascular diseases, liver diseases and pulmonary diseases [1,3–5].

By using a ROC curve, the cut-off point of NT-pro-BNP that optimally predicted a stroke after TIA was 800 pg/mL (AUC 0.767, sensitivity 64%, specificity 79%). Hence, NT-pro-BNP is a promising predictor of stroke

risk after TIA, but there is a long way to go. Firstly, NT-pro-BNP is mainly associated with cardioembolic, the predictive value in atherothrombotic is limited. Secondly, if there is a difference in the predictive value of ischemic and hemorrhagic stroke. Thirdly, researchers should take influencing factors into account. What's more, the mechanism for NT-pro-BNP as a predictor of stroke is unclear. Taken these together, it is necessary to carry out more basic and clinical study to determine the predictive value of NT-pro-BNP.

Declaration of Competing Interest

None.

References

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