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**THE VALUE OF PLASMA NT-PROBNP LEVELS  
IN PREDICTING THE EFFECT OF DRUG  
CONVERSION FOR PAROXYSMAL ATRIAL  
FIBRILLATION**

Chen Lei, Liu Xincan, Sun Tianfu, Han Jinghui *The First Affiliated Hospital of Henan University of Tcm*

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**Objective** To investigate the value of plasma NT-proBNP levels in predicting the effect of drug conversion for paroxysmal atrial fibrillation.

**Method** The 132 patients with non-valvular paroxysmal atrial fibrillation were treated by oral loading – dose of propafenone (450–600 ng/l) within 1 h after admission. The plasma NT-proBNP concentrations were measured before and after conversion therapy.

**Result** Atrial fibrillation was converted to sinus rhythm in 83 patients (62.87%) after oral loading-dose of propafenone. The plasma NT-proBNP levels before drug conversion in patients with successful conversion were lower than that in patients with non-successful conversion ( $419.53 \pm 43.83$  ng/l vs  $458.11.76 \pm 66.09$  ng/l,  $p < 0.01$ ); and it decreased significantly after successful drug conversion ( $189.61 \pm 37.38$  ng/l vs  $419.53 \pm 43.83$  ng/l,  $p < 0.01$ ). There was no significant difference of plasma NT-proBNP concentration before and after propafenone treatment ( $458.11.76 \pm 66.09$  ng/l vs  $444.76 \pm 67.28$  ng/l ( $p > 0.05$ )) in patients not converted to sinus rhythm. Receiver Operating Characteristic Curve (ROC curve) analysis was used to determine the optimal cut-off (432.25 ng/l) of this assay for identifying individuals who converted to sinus rhythm from those did not.

**Conclusion** Atrial fibrillation is a significant factor influencing the secretion of BNP in patients with non-valvular heart disease and plasma NT-proBNP levels can be used as a biomarker to predict the effect of drug conversion for paroxysmal atrial fibrillation.