

Background Although adjunctive BNJ to clopidogrel can enhance the antiplatelet effect in volunteers with CYP2C19*2 gene mutation, it is unknown whether adjunctive BNJ can improve the clinical prognosis in patients with CYP2C19*2 gene mutation undergoing PCI.

Methods 90 patients with CYP2C19*2 gene mutation after a 300-mg loading dose of clopidogrel were enrolled. CYP2C19*2 gene mutation was confirmed by TaqMan PCR. Patients were randomly assigned to receive either adjunctive BNJ (trial group; n=45) or standard maintenance dose clopidogrel (control group; n=45). Platelet function was assessed at baseline and after 7 days with conventional aggregometry. Subsequent major adverse cardiovascular events (MACE, including cardiac death and acute coronary syndrome) were recorded during a median follow-up of 9 months.

Results Baseline platelet function measurements were similar in both groups. After 7 days, Percent inhibitions of 5 μ mol/l ADP-induced maximum platelet aggregation and late platelet aggregation were significantly greater in the trial versus control group ($42.3\pm 16.0\%$ vs $20.8\pm 15.2\%$, $p<0.001$, and $54.7\pm 18.3\%$ vs $21.5\pm 29.2\%$, $p<0.001$, respectively). During a follow-up for median 9 months, subsequent MACE (6/45) in trial group were much lower than those (14/45) in control group ($p<0.05$).

Conclusion Adjunctive BNJ to standard maintenance dose clopidogrel can enhance the antiplatelet effect and decrease subsequent MACE in patients who carried CYP2C19*2 gene mutation undergoing PCI.

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**RANDOMISED COMPARISON OF ADJUNCTIVE
NAOXINTONG VERSUS STANDARD
MAINTENANCE DOSE CLOPIDOGREL IN PATIENTS
WITH CYP2C19*2 GENE MUTATION**

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Objectives The purpose of this study was to determine the impact of adjunctive Buchang Naoxintong Jiaonang (BNJ) in patients with CYP2C19*2 gene mutation undergoing percutaneous coronary intervention (PCI).