

[gw22-e0812]

**REDUCTIONS IN BLOOD PRESSURE WITH
ADDITIONAL LIPID-LOWERING TREATMENT
AMONG HYPERTENSIVE PATIENTS: RESULTS
FROM CHINA**

Zhang Xingang *The First Affiliated Hospital of China Medical University, Shenyang, China*

10.1136/heartnl-2011-300867.588

Background Recently several clinical studies have also shown that lipid-lowering drugs may exert a favourable effect on blood pressure. But to our knowledge there are no data showing the effect of lipid-lowering in China.

Methods A cluster randomised, blind design was conducted from June 2006 to August 2007. Participants were randomised to antihypertensive treatment with or without the addition of lipid-lowering treatment (Xuezhikang capsule). The antihypertensive treatment regimen consisted of a titration to target blood pressure (systolic Bp<140 mm Hg and diastolic Bp<90 mm Hg). After a 14 months' follow-up, 2427 subjects (antihypertensive therapy group 1396 and antihypertensive combined lipid-lowering group 1031) were included in analysis. The χ^2 tests and t tests were used to detect the differences of hypertension control rate and the decline of BP between treatment arms.

Results Systolic BP dropped 25.8 mm Hg from baseline by the antihypertensive treatment, whereas, 28.5 mm Hg by the combined treatment at the end of follow-up. In contrast, combined therapy had an average systolic BP 2.7 mm Hg lower than antihypertensive therapy ($p<0.01$). However, the effect was not happen on diastolic BP. Compared with antihypertensive treatment, using combined treatment made systolic BP significantly dropped in the low levels of low density lipoprotein (LDL) cholesterol group (2.8 mm Hg, $p<0.01$), low total cholesterol group (3.0 mm Hg, $p<0.01$), and two high density lipoprotein (HDL) cholesterol groups, especially in low HDL-cholesterol group (6.6 mm Hg vs 2.3 mm Hg, $p=0.04$). In contrast to systolic BP, however, diastolic BP reductions were not focused in any cholesterol subgroup.

Conclusions Relative to antihypertensive therapy alone, a significant reduction in systolic BP due to antihypertensive combined lipid-lowering therapy. Analysis in subgroup showed that BP decreased more in low LDL-cholesterol group, low total cholesterol group, and low HDL-cholesterol group.