

Meta-analysis on the efficacy evaluation of anti-hypertensive drugs for Coronary heart disease

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Objectives :To quantify prevention effect of antihypertensives to patients with hypertension on the occurrence of cardiovascular disease, a meta-analysis of data collected from 11 studies was conducted.

Materials and Methods: Studies published from 1980 to 1987 were identified through a MEDLINE computer search and an extensive manual search of the bibliographies of identified articles. 11 randomized studies were founded to be appropriate, and 9 of which were placebo controlled studies. Two specialists on epidemiology independently evaluated trial qualities and abstracted quantitative data on clinical characteristics of the populations, interventions, and relative risks.

Results : Using the method of Mantel-Haenszel, the common RR of antihypertensive use on the development of CHD was less than 1(0.82 95% CI: 0.727-0.97), and common RR on MI was 0.77(95% CI: 0.623-0.916). We also observed homogeneity of effect across studies(P<0.05) by Breslow-Day test.

Conclusion : This result shows that use of antihypertensives has statistically significant protective effect on the development of cardiovascular disease.