# Beneficial effects on fasting hyperinsulinemia by low dose pravastatin in elderly hypertensive hypercholesterolemic subjects on antihypertensive therapy.

陳保羅

Chan P;Tomlinson B;Pan WH and Lee YS

摘要

**Abstract**

We undertook this prospective double-blind, placebo-controlled study to evaluate the efficacy and safety of low-dose (15 mg) pravastatin in elderly hypercholesterolemic hypertensive subjects with concurrent antihypertensive treatment and to determine whether fasting hyperinsulinemia could also be improved. At three hypertension and lipid clinics of two medical centers, 96 elderly (49 women, 47 men) ambulatory subjects were randomized to active treatment or placebo for 12 months after a 3-month single-blind lead-in period. Hypertensive subjects with plasma total cholesterol levels of at least 6.47 mmol/L (250 mg/dL) and triglyceride levels less than 3.39 mmol/L (300 mg/dL) were treated with 15 mg pravastatin for 12 months after receiving 3 months of the American Heart Association step I diet. Lipid, glucose, and fasting insulin levels were measured; clinical laboratory tests included liver function and creatine kinase determinations. After 12 months of pravastatin therapy, plasma total cholesterol concentration decreased by 25.1% (from a mean of 7.29 to 5.47 mmol/L, P<.05), low-density lipoprotein cholesterol decreased by 30.2% (from 5.27 to 3.68 mmol/L, P<.05), and triglycerides decreased by 10.7% (from 1.68 to 1.50 mmol/L, P<.05). High-density lipoprotein cholesterol increased by 9.2% (from 1.20 to 1.31 mmol/L, P<.05). Fasting insulin levels decreased from 89.0 to 61.5 pmol/L (P<.05). All of these changes were greater (P<.05) than any tendency toward change in the placebo group. Adverse events and clinical laboratory abnormalities were generally mild and transient in both placebo and pravastatin groups. Study drugs were withdrawn from one subject in each group with asymptomatic creatine kinase elevations. We conclude that low-dose pravastatin was effective and safe in the treatment of hypercholesterolemic hypertensive subjects on concurrent

antihypertensive therapy. It also improved fasting hyperinsulinemia despite the use of ß-blockers and diuretics in these hypertensive subjects