

TOTAL CHOLESTEROL CHANGE AND GOAL ATTAINMENT AFTER RECEIVING ROSUVASTATIN-AN EXAMPLE FROM A REGIONAL TEACHING HOSPITAL IN TAIWAN

C-L Tsai , MD

Section of Endocrinology and Metabolism, Department of Internal Medicine,

Tungs' Taichung MetroHarbor Hospital, Taiwan

BACKGROUND / AIMS: Of the top ten leading causes of death in Taiwan, stroke, heart disease, diabetes, and hypertension are all highly associated with dyslipidemia. Rosuvastatin has been available in Taiwan since March 2005. With its proven high potency in Western countries, the data for Taiwanese are still limited. This study also aimed to survey the contributing factors of cholesterol change.

METHODS: A retrospective cohort study was conducted, which included 129 patients who had received rosuvastatin 5 or 10 mg per day for at least 3 months between July and November 2005. While receiving rosuvastatin, these patients were not treated with other lipid-lowering drugs. Total cholesterol data at baseline and after receiving rosuvastatin were collected. Personal data and history were analyzed to find possible relationships with total cholesterol change.

RESULTS: Besides dyslipidemia, 95 patients (73.6%) had hypertension, 93 patients (72.1%) had diabetes and 109 patients (84.5%) were overweight or obese. Seventy-seven patients (59.7%) were current statin users, while 52 patients (40.3%) were fresh cases. The total cholesterol (TC) change was $26.47\% \pm 19.3\%$ in all patients, with $31\% \pm 15\%$ in fresh cases and $24\% \pm 22\%$ in current statin users ($p < 0.05$). Ninety-four patients (72.9%) had reached the goal of total cholesterol level of 200mg/dL, while 57 patients (44.2%) achieved the level of 160mg/dL. Pearson correlation analysis showed that TC change (%) had a strong positive association with baseline TC level ($p < 0.001$).

DISCUSSION/CONCLUSION: This study supports that most patients with dyslipidemia have other cardiovascular risk factors. With 5 or 10 mg rosuvastatin, fresh cases seemed to have more cholesterol-lowering benefit than current statin users. The difference might be due to higher TC level in fresh cases or possible "cholesterol threshold" in current statin users. Since 35 patients (27.1%) still could not reach a TC goal of 200 mg/dL, more aggressive behavioral therapy and/or other cholesterol-lowering drugs should be considered for these kinds of patients.

Key Words: rosuvastatin, dyslipidemia, total cholesterol