ATORVASTATIN 20 MG MAY BE THE OPTIMAL DOSE FOR TREATING DYSLIPIDEMIA IN TYPE 2 DIABETIC SUBJECTS

Hing-Chung Lam, Chih-Hsun Chu, Chih-Chen Lu, Chun-Chin Sun, Mei-Chih Wei, Jenn-Kuen Lee

Department of Internal Medicine and Department of Medical Education and Research, Kaohsiung Veterans General Hospital and National Yang-Ming University School of Medicine, Taiwan, R.O.C.

<u>AIMS</u>: Three different daily doses (10mg, 20 mg, 40 mg) of atorvastatin, a 3-hydroxy-3methylglutaryl coenzyme A reductase inhibitor, on plasma lipid profiles in type 2 diabetic subjects were investigated.

<u>METHODS</u>: Twenty-nine type 2 diabetic dyslipidemic Taiwanese were randomly assigned to take orally atorvastatin 10 mg (A10, n=10), 20 mg (A20, n=10), or 40 mg (A40, n=9) daily for 12 weeks. Plasma samples were frozen and stored at -20 ^oC until assayed.

RESULTS: All doses of atorvastatin were well tolerated. Levels of plasma total cholesterol, LDL-cholesterol (LDL-C), and triglyceride (TG) in all three study groups were significantly decreased after treatment with atorvastatin for 12 weeks. However, the greatest LDL-C lowering effect (36%, 54%, and 51% in A10, A20, and A40, respectively) and the highest proportions of participants that attained the National Cholesterol Education Program's Adult Treatment Panel III (NCEP-ATP III) LDL-C goal (<100 mg/dl) by the end of the study (40%, 90%, and 78% in A10, A20, and A40, respectively) were noted in the A20 group. The TG-lowering effect by the end of the study was 37%, 36%, and 29% in A10, A20, and A40, respectively. However, no significant changes in plasma HDL-C as well as glycosylated hemoglobin levels were evident among the three treatment groups.

<u>CONCLUSION</u>: The present study suggests that atorvastatin 20 mg may be the optimal dose for treating dyslipidemia in type 2 diabetic subjects.

Key Words: atorvastatin, dyslipidemia, type 2 diabetes