Abstract

Coronary events are the leading cause of death in subjects with type 2 diabetes, and increased platelet aggregation and serum low-density lipoprotein-cholesterol (C-LDL) contribute to coronary risk in diabetes patients. D-003, a mixture of sugarcane wax acids, has shown to reduce platelet aggregation and serum C-LDL in normocholesterolemic and hypercholesterolemic subjects. This doubleblinded, placebo-controlled study investigated the effects of D-003 on platelet aggregation and lipid profile in 50 type 2 diabetes patients who were randomized, after a baseline phase, to D-003 (10 mg/d) or placebo for 10 weeks. All the subjects completed the study. D-003 significantly lowered arachidonic acid- (52.9%) and collagen-induced (54.4%) platelet aggregation, C-LDL (26.7%), total cholesterol (TC) (19.6%) and triglycerides (23.9%), while increased high-density lipoprotein-cholesterol (C-HDL) (12.4%) vs baseline and placebo. D-003 was safe and well tolerated. To conclude with, D-003 significantly reduced platelet aggregation and serum C-LDL in type 2 diabetes, but further studies should confirm these results.

Keywords

D-003, Type 2 diabetes mellitus, Platelet aggregation, Lipid profile