LETTER TO THE EDITOR

Letter to the editor: Treating nonalcoholic fatty liver disease with statins. Are all statins equal?

Vasilios G. Athyros,1 Niki Katsiki,1 and Dimitri P. Mikhailidis2

1Second Propedeutic Department of Internal Medicine, Medical School, Aristotle University of Thessaloniki, Hippocratie Hospital, Thessaloniki, Greece; and 2Department of Clinical Biochemistry, Royal Free Hospital Campus, University College London Medical School, University College London, London, United Kingdom

Submitted 29 March 2017; accepted in final form 29 March 2017

IN A RECENT ISSUE of the American Journal of Physiology-Gastrointestinal and Liver Physiology, Schierwagen et al. (8) reviewed the outcomes of statins on liver and cardiovascular disease (CVD) (8). A few comments might be of interest.

In 2010, our post hoc analysis of the GReek Atorvastatin and Coronary heart-disease Evaluation (GREACE) study (n = 1,600) (3) showed that atorvastatin (average dose, 24 mg/day) for 3 yr in patients with coronary heart disease (CHD) halved CVD events in a subgroup of patients with likely nonalcoholic fatty liver disease, i.e., NAFLD, the most common liver disease (4). Three years later, the secondary prevention Initiating Dialysis Early and Late (IDEAL) study (n = 8,863) that included participants with high alanine transaminase (ALT) levels confirmed our findings for the beneficial effect both on NAFLD and CVD with high-dose atorvastatin (80 mg/day) compared with simvastatin (20 mg/day) (9). This was also the case with the Assessing The Treatment Effect in NASH resolution (ATTEMPT) (n = 1,123), a primary prevention study, using atorvastatin (average dose, 30 mg/day) (2). These three studies are limited by being post hoc analyses and by the absence of histology, the gold standard for the diagnosis of NAFLD/nonalcoholic steatohepatitis (NASH).

A study with biopsy-proven NASH (n = 20) showed that 10 mg/day rosuvastatin eliminated histologically NASH in the repeat biopsy a year later in 19 or 20 patients (6). Another study (n = 346) with biopsy-proven NAFLD reported that statins ameliorate NAFLD/NASH (7). There is also a study reporting benefits after administration of pitavastatin in a specific patient group (5). Other studies supporting a benefit were mentioned by Schierwagen et al. (1).

Overall, the beneficial effect of statins on NAFLD/NASH may be statin dose related; some statins may be more effective (e.g., atorvastatin and rosuvastatin); and in addition to improved liver pathology, the high CVD event rate in these patients at high risk may decrease substantially (3). These factors need to be established/refuted by appropriately designed trials to help treatment choices for those with NAFLD/NASH. These are highly prevalent and harmful diseases where more patients will die from a vascular death than from a hepatic death (3). Some of these concepts are considered in a recent expert panel statement (1).

DISCLOSURES

This letter was independently written; no company or institution supported the authors financially or by providing a professional writer.

V. G. Athyros has given talks, attended conferences and participated in trials sponsored by Merck Sharp & Dohme (MSD), Angelini, Sanofi, and Amgen; N. Katsiki has given talks, attended conferences and participated in trials sponsored by Amgen, Angelini, AstraZeneca, Boehringer Ingelheim, MSD, Novartis, Novo Nordisk, Sanofi, and WinMedica; and D. P. Mikhailidis has given talks and attended conferences sponsored by MSD, AstraZeneca and Libytec.

AUTHOR CONTRIBUTIONS

V.G.A. conceived and designed research; V.G.A. analyzed data; V.G.A., N.K., and D.M. interpreted results of experiments; V.G.A. drafted manuscript; V.G.A., N.K., and D.M. edited and revised manuscript; V.G.A., N.K., and D.M. approved final version of manuscript.

REFERENCES


http://www.ajpgi.org 0193-1857/17 Copyright © 2017 the American Physiological Society G681