Update on Fenofibrate

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Key words: Atherosclerosis—Cholesterol—Diabetes mellitus—Fenofibrate—Fibrates—Procetofen—Triglycerides.

ABSTRACT

Fenofibrate is a fibric acid derivative that has been marketed since the mid-1970’s (1998 in the United States). Its active metabolite, fenofibric acid, is responsible for the primary pharmacodynamic effects of the drug: reductions in total plasma cholesterol, low-density lipoprotein cholesterol, triglycerides, and very low-density lipoprotein concentrations and increases in high-density lipoprotein cholesterol and apolipoproteins A1 and AII concentrations. These effects are mediated by activation of peroxisome proliferator-activated receptor-α (PPAR_α). The drug has broad spectrum utility, with documented efficacy in Fredrickson types IIa, IIb, III, IV, and V hyperlipidemias. Fenofibrate is well tolerated, with digestive and musculoskeletal side effects similar to those of other fibrates. Results of the initial cardiovascular morbidity/mortality outcomes study with fenofibrate (known as DAIS [Diabetes Atherosclerosis Intervention Study]) were encouraging vis-à-vis slowing of atherosclerotic progression in the coronary vasculature of type II diabetics. The results of other ongoing outcome trials are eagerly awaited. These results will help to establish the overall place of fenofibrate in the hypolipidemic armamentarium.