EFFECT OF RANDOMIZED LIPID LOWERING WITH SIMVASTATIN AND EZETIMIBE ON CATARACT DEVELOPMENT: THE SEAS STUDY

Poster Contributions
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Background: Observational data indicate a possible effect of statin therapy on reducing risk of lens opacities.

Methods: 1,873 patients with asymptomatic aortic stenosis and no history of diabetes, coronary heart disease or other serious comorbidities were randomized (1:1) to double-blind 40 mg simvastatin plus 10 mg ezetimibe vs. placebo. Primary endpoint in this substudy was incident cataract. Uni- and multivariable Cox models were used to analyse: 1) if the active treatment reduced the risk of the primary endpoint; and 2) if time-varying lipid-lowering (annually assessed) was associated with less incident cataract per se.

Results: During an average follow-up of 4.3 years, 65 patients developed cataract. Mean age at baseline was 68 years and 39% were women. In Cox-multivariable analysis adjusted for age, gender, prednisolone treatment, smoking, baseline total cholesterol and high sensitivity C-reactive protein; simvastatin/ezetimibe vs. placebo was associated with 44% lower risk of cataract development (HR: 0.56 [95%CI: 0.33-0.96], p=0.034). Similarly adjusted, time-varying lipid-levels were in itself an independent predictor of incident cataract (HR: 0.82 per 1 mmol/ml lower total cholesterol [95%CI: 0.69-0.97], p=0.021).

Conclusions: In a large randomized placebo controlled trial of middle-aged subjects with aortic stenosis, treatment with simvastatin/ezetimibe was associated with reduced risk of incident cataract by 44%.