

this low-dose during the first year of treatment. These patients did not differ in LDL-cholesterol level and macro- and microvascular comorbidity compared to patients on standard-dose treatment. The mean adherence was around 80% in both groups. The effect of adherence on LDL-cholesterol response, measured in 1,797 patients, was dependent on the baseline LDL-cholesterol level. With an average baseline LDL-cholesterol level of 3.8 mmol/l, an increase in adherence of 10% resulted in an estimated decrease in LDL-cholesterol of 0.2 mmol/l. In the matched sample of 950 patients, treatment dose modified the association between adherence and LDL outcome. For adherence rates >80% there was a significant difference in effectiveness of low-dose versus standard-dose statin treatment.

Conclusions: For patients with poor adherence rates (MPR < 80%), lipid targets are difficult to achieve regardless of being on low-dose or standard-dose treatment. For the majority of patients with an MPR above 80%, the standard-dose treatment is more effective than low-dose treatment making it easier to achieve lipid targets.

608. Effect of Long-Term Aspirin Use on the Risk for Neovascular Age-Related Macular Degeneration

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Background: Results from several cohort studies have indicated that long-term low-dose aspirin (acetylsalicylic acid, ASA) use markedly increases the risk for neovascular age-related macular degeneration (nAMD). nAMD is a serious condition that causes rapid decline in central-field vision over the course of days to weeks.

The studies currently available obtained data from questionnaires, therefore lacking high-quality information regarding exposure to low-dose ASA, and had few nAMD cases.

Objectives: To quantify the risk for nAMD associated with long-term low-dose ASA use.

Methods: A case-control study was conducted, including all cases of nAMD in the period 1 January 1987 - 31 December 2012 aged 50 years and older from the UK Clinical Practice Research Datalink (CPRD) database. Cases were matched to up to five controls on age, gender and general practice.

Conditional logistic regression was used to estimate odds ratios for the risk of nAMD associated with increasing durations of low-dose ASA use, adjusting for smoking status, obesity, glaucoma, hypercholesterolaemia, and lipid lowering medication, and cardiovascular diseases.

Results: 4,125 cases were matched to 20,173 controls. Cases had a median age of 80.1 years and were in majority female (64.7%). Overall, the risk for nAMD associated with low-dose ASA use was a small but significantly increased adjusted risk of 1.12 (95% confidence interval 1.03 - 1.21). We observed a trend for increasing risk with prolonged use: odds ratios were 1.06 (use for less than two-and-a-half years; 95% CI 0.96 - 1.17), 1.07 (two-and-a-half to five years; 95% CI 0.94 - 1.21), 1.17 (five to ten years; 95% CI 1.04 - 1.31), 1.23 (ten to fifteen years; 95% CI 1.05 - 1.45), and 1.33 (more than fifteen years; 95% CI 1.08 - 1.63), compared to no ASA use.

Conclusions: Long-term use of low-dose ASA is associated with an increased risk for nAMD. This risk is lower than previously observed and small compared to other risk factors and the benefit-risk balance of low-dose ASA for the prevention of cardiovascular disease will not be impacted.

609. Preadmission Non-Steroidal Anti-Inflammatory Drug Use and 30-Day Stroke Mortality

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Background: The prognostic impact of non-aspirin non-steroidal anti-inflammatory drugs (NSAIDs) on stroke mortality remains unclear.

Objectives: We examined whether preadmission use of nonselective NSAIDs and selective cyclooxygenase (COX)-2 inhibitors influenced 30-day stroke mortality.