Abstract: P5363

Adherence to statin therapy drives survival of patients with symptomatic peripheral artery disease

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Background: Statins reduce cardiovascular morbidity and mortality, but adherence is suboptimal. We hypothesized that adherence to statin therapy determines survival in a population at very high cardiovascular risk.

Methods: Single center observational study with 691 symptomatic PAD patients admitted to a tertiary university center between 2010 and 2017. Outcome was evaluated over a mean follow-up of 50±26 months. We related statin adherence and LDL-C target attainment to total mortality.

Results: At the first contact, 73 % of our PAD patients were on statins with a significant increase in statin use to 81 % (p<0.0001) at follow-up: Statin dosage, normalized to simvastatin 40 mg, increased from 50 to 58 mg/day (p<0.0001), and was paralleled by a mean decrease of LDL-C from 97 to 82 mg/dL (p<0.0001). The proportion of patients receiving a high intensity statin increased over time from 38 to 62 % (p<0.0001). Percent LDL-C decrease over time was highest in patients with high intensity statin treatment, followed by moderate, low intensity or non-statin treatment, respectively (p=0.01).

Patients never receiving statins had a higher mortality rate (34%) as compared to patients being on statins (20%) or having newly received a statin (15%; p < 0.01). Moreover, patients on intensified statin medication had the lowest mortality (10%), whereas patients who terminated statin medication or reduced the statin dosage had a higher mortality rate (33% and 43%, respectively; p < 0.05).

Conclusion: Our data prove that statin treatment, particularly high-intensity therapy, reduces mortality in symptomatic PAD. In terms of mortality, patients benefit even from de novo statin therapy ("it is never too late"), whereas dose reduction or statin discontinuation have deleterious effects. A strategy of intensive and sustained statin therapy is worthwhile.
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