

STATIN OVERUSE? EVALUATION OF STATIN INITIATION FOR PRIMARY PREVENTION DURING HOSPITALISATION BETWEEN TWO NEIGHBOURING COUNTRIES IN EUROPE IN HIGH-RISK PATIENTS



D. HAIDER¹, B. ARTHOFER², P. DROFENIK³, N. GRŽINIČ⁴, C. HAIDER², M. PETRE³, A. POINTINGER⁵, M. RAVNIKAR⁶, I. SCHNEIDER⁵, T. TOMŠIČ⁶

¹SOZIALMEDIZINISCHES ZENTRUM SÜD – KAISER-FRANZ-JOSEF SPITAL und GOTTFRIED VON PREYER SCHEM KINDERSPITAL, PHARMACY, VIENNA, AUSTRIA

²KLINIKUM WELS-GRIESKIRCHEN, HOSPITAL PHARMACY, WELS, AUSTRIA

³JKC MARIBOR, HOSPITAL PHARMACY, MARIBOR, SLOVENIA

⁴JKC LJUBLJANA, HOSPITAL PHARMACY, LJUBLJANA, SLOVENIA

⁵KEPLER UNIVERSITÄTSKLINIKUM LINZ, HOSPITAL PHARMACY, LINZ, AUSTRIA.

⁶SB NOVO MESTO, HOSPITAL PHARMACY, NOVO MESTO, SLOVENIA



BACKGROUND

Due to Guidelines of the ESC/EAS the number of patients recommended to receive statin therapy for primary prevention of Atherosclerotic Cardiovascular Disease (ASCVD) has increased. Critical voices expressed concern, that implementation of these guidelines may lead to statin overuse. ESC/EAS recommend using risk calculators for Systematic Coronary Risk Evaluation (SCORE) to estimate patients 10-year fatal ASCVD risk. However, data identifying statin utilization based on SCORE in European hospitals is lacking.

PURPOSE

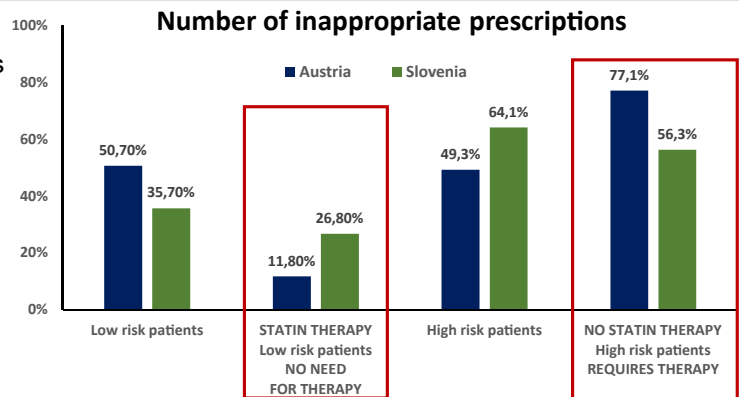
The aim of the study was to evaluate whether there is a difference in the treatment of patients with high risk between two neighboring countries in Europe according to ESC/EAS guidelines.

MATERIALS AND METHODS

A multi-site, international, retrospective, cross-sectional study was conducted in three hospitals in Austria and three hospitals in Slovenia. At each site approximately 20% monthly discharges from selected wards were reviewed. For each patient data on age, gender, lipid levels, smoking status, systolic blood pressure, serum creatinine, liver function, presence of cardiovascular disease (CVD) or diabetes and prescribed cholesterol lowering agents was collected. Ten-year risk for fatal CVD was calculated using SCORE low risk charts. Patients with SCORE calculation ≥ 5 and patients with diabetes were classified as high risk.

RESULTS

We included 138 Austrian patients (mean age $61,9 \pm 10,3$; 52,2% men) and 198 Slovenian patients (mean age $63,4 \pm 10,6$; 57,6% men). Patients from Slovenia were at higher risk compared to patients from Austria (64,1% versus 49,3%; $p=0,07$). 77,1% of high risk patients from Austria and 56,3% from Slovenia did not receive a statin during hospitalization ($p=0,009$). In 16,7% of Austrian and 58,1% of Slovenian patients, LDL was measured during the hospital stay. 7,1% of high risk Austrian patients with no statin had $LDL < 2,6 \text{ mmol/l}$ compared to 8,5% of high risk Slovenian patients.



CONCLUSION

In the population we investigated there is no risk of statin overuse in high risk patients so far. Despite robust evidence of their efficacy and safety, statin use is still low in high-risk patients in primary prevention for ASCVD to reduce preventable CVD morbidity and mortality in both countries according to ESC/EAS Guidelines. However, bearing in mind the ubiquitous problem of polypharmacy and associated risks and economic burden, the role of clinical pharmacists in preventing overuse of statins in low risk patients is of equal importance.

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