

P069

P069 -Prescribing pattern on the use of Statins following Acute Kidney Injury (AKI)

Mrs Aleli Akani¹, Dr Sue Shaw¹, Mrs Rebecca Packington¹, Marteen Taal^{1,2}, Dr Nick Selby^{1,2}

¹University Hospitals of Derby and Burton NHS Foundation Trust, Derby, United Kingdom, ²Centre of Kidney Research and Innovation, University of Nottingham, Nottingham, United Kingdom

Introduction

At the time of acute kidney injury (AKI), medications are frequently changed or stopped. This may have relevance to the long-term sequelae that follow AKI, in particular to the higher rates of cardiovascular events. Statins only rarely cause AKI, but anecdotal evidence would suggest that these medications are often withheld at the time of AKI. We therefore aimed to assess the patterns of statin prescribing in response to AKI and during subsequent long term follow up.

Methods

In a single UK centre, a hospital-wide electronic AKI detection system was used to identify cases (hospitalised patients who sustained AKI) and controls (hospitalised patients without AKI). Patients were matched 1:1 with controls for age, baseline eGFR stage and diabetes. Comprehensive prescribing data were collected by research pharmacists from the electronic medical records in secondary care at the following time points: hospital admission; hospital discharge; and 1 year post AKI. Each patient was categorised on the basis of risk factors that would indicate statin use as per current guidelines (acute myocardial infarction, cerebrovascular accident, chronic heart failure, diabetes mellitus, peripheral vascular disease, diabetic complications, renal disease and baseline renal function of eGFR<60). Analyses were performed to describe rates of prescribing patterns at different time points and in relation to whether statins were indicated.

Results

A total of 1125 patients were recruited, from which 866 patients were matched successfully (433 cases and 433 controls). At baseline, statin use was similar between groups. Statins were stopped slightly more frequently in the AKI group, resulting in fewer patients receiving statin on discharge although this difference was small (51.4% in AKI vs 54.3% in control group, p=0.013). Overall, there were 56.6% of patients in the AKI group and 51.0% of patients in the control group who had risk factors that would indicate statin use. At 1 year, the proportion receiving statins in AKI and control groups were 46.8% and 53.2% respectively. In terms of those with indications for statin use, the proportion prescribed statins were 68.6% in the AKI group and 69.3% control group.

Conclusions

In a general hospitalised population, AKI resulted in only small changes in statin prescribing at time of AKI, and differences between AKI and control groups has largely disappeared at 1 year. Conversely, only two-thirds of patients who had one or more indications for statin use were actually receiving them, despite the association of AKI with higher rates of long-term cardiovascular events. This may suggest that episodes of AKI could be utilised to identify patient groups for initiatives to increase statin uptake in those who may benefit, although this would need to be tested in future studies.