Lessons learned from an audit of the use of atorvastatin 80 mg for secondary prevention of cardiovascular disease in a tertiary hospital

Authors: Khoon-Sheng Kok and Timothy Gilbert

Aims

- To determine if all patients admitted with acute coronary syndrome (ACS) are initiated on atorvastatin 80 mg (Atorva80) 'without delay' as per NICE guidance issued in July 2014, unless contraindicated or a documented consultant decision.
- > To determine if the above applied to patients already on a different statin therapy.
- > To determine if patients had their liver function tests (LFTs) checked prior to initiating on Atorva80.

Methods

This was a prospective audit of consecutive patients that attended the hospital with an acute admission of ACS. Their drug charts and blood results were reviewed within 48 hours and upon discharge. Patients' demographics, clinical information and statin usage were recorded and analysed.

Results

40 patients admitted with ACS were reviewed in a 3-week period. Their mean age was 67.5 years old, with majority of patients being male (n = 33).

26 patients were statin naive on arrival to hospital. Out of these patients, only 53.8% (n = 14) were started on Atorva80. The other 12 patients were put on various types of statins, with five patients placed on simvastatin 40 mg. Only one patient had a documented consultant decision for not initiating Atorva80. 23 out of 26 statin-naive patients had LFTs checked prior to appropriate commencement.

14 patients were already on a lipid-lowering agent on admission, with one patient on bezafibrate and one on Atorva80. Excluding these patients, 50% (n = 6) of patients did not have their statins increased or changed to Atorva80 after ACS.

Patients not placed on Atorva80 had no pharmacological contraindications for this.

When we reviewed patients' medications on discharge, five patients had changed to Atorva80 appropriately.

Conclusions

Our audit highlights poor compliance towards NICE guidance in the use of Atorva80 for secondary prevention of cardiovascular disease in our trust. One of the reasons could be due to lack of knowledge from juniors, as evident by change to appropriate medication on discharge upon senior review. We plan to carry out teaching sessions to juniors at the start of their cardiology rotation, with a reaudit planned in a year's time.

Nonetheless, we need to be cautious in following NICE guidance strictly. Switching to high-dose statins needs to be considered on a case-by-case basis. The audit highlights need for further guidance in patients who develop ACS already on a lipid-lowering agent, and whether a change in type and/or dosage of statin is necessary.

Authors: Norfolk and Norwich University Hospital, Norwich, UK