

Lipid lowering therapy for secondary stroke prevention in a stroke clinic

C. Kennedy, H. O'Brien, D. Williams. Department of Geriatric and Stroke Medicine, Beaumont Hospital, Dublin, IRELAND.

Introduction The Stroke Prevention by Aggressive Reduction in Cholesterol Levels trial (SPARCL) demonstrated a reduction in further strokes in those with a previous stroke when treated with high dose atorvastatin whilst the Heart Protection Study suggested a 25% reduced relative risk of stroke in those with cerebrovascular disease and total cholesterol >3.5mmol/l when treated with simvastatin 40mg. We audited patients attending a stroke clinic in terms of statin prescribing and its cholesterol lowering benefit.

Method The charts of consecutive patients attending the stroke clinic at Beaumont hospital over a six-week period were reviewed. Those with previous ischaemic stroke and a complete dataset available were included in the audit. Demographic details, aetiology of the stroke, statin therapy as well as their lipid profile at presentation and the most recent profile were recorded. The total cholesterol (TC) and low density lipoprotein (LDL) were compared to current guidelines from the European Society of Cardiology (ESC) and the American Stroke Association (ASA). Following presentation of the first cycle results to the department, the physicians were asked to check a lipid profile annually, increase the statin dose if appropriate, encourage medication adherence and advise on lifestyle interventions. The reaudit was performed after a nine month interval.

Results 33 patients were included in the first cycle. 18 were excluded due to incomplete data sets. 30 (91%) patients were on a statin. 70% of patients were on a high intensity statin. 76% had a lipid profile in the last year. 58% of patients reached the ESC TC target (<4.5mmol/L) and 64% reached the LDL target (<2.5mmol/L). 39% of the cohort reached the ASA targets (<1.8mmol/L or 50% reduction in LDL). These figures and their corresponding figures for the reaudit are displayed in the table below.

	First Cycle (n=33)	Second Cycle (n=35)
On Statin Therapy	91%	94%
Lipid Profile in the last year	76%	89%
ESC TC Target	58%	77%
ESC LDL Target	64%	77%
ASA Targets	39%	45%

Conclusion The intervention raised physician awareness regarding the monitoring of lipid profiles and alteration of treatment as appropriate for secondary stroke prevention. This may have resulted in greater treatment monitoring and greater numbers of patients attaining international standards. An annual audit is recommended to ensure the continuation of high standards of care for the patients attending the stroke clinic.

