

RGH Pharmacy E-Bulletin

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A joint initiative of the Patient Services Section and the Drug and Therapeutics Information Service of the Pharmacy Department, Repatriation General Hospital, Daw Park, South Australia. The RGH Pharmacy E-Bulletin is distributed in electronic format on a weekly basis, and aims to present concise, factual information on issues of current interest in therapeutics, drug safety and cost-effective use of medications.

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Statin therapy for patients with high CVD risk

Current guidelines for lipid management state that the identification of individuals at higher absolute risk of a cardiovascular disease (CVD) event is necessary in order to initiate the most cost-effective risk management strategies, as these are the patients who have the most to benefit. The current criteria for subsidised supply of statins through the Australian Pharmaceutical Benefits Scheme (PBS) reflect this, as certain high risk patients are eligible for PBS subsidy regardless of baseline cholesterol concentrations. The Heart Protection Study (HPS), published in 2002, provided much of the evidence for this approach. 20 536 adults aged 40-80 years who were considered to be at substantial 5-year risk of death from coronary heart disease because of a past history of coronary disease, other occlusive arterial disease, or diabetes, were randomly allocated to receive 40 mg simvastatin daily or placebo. The addition of simvastatin to existing treatments produced a reduction in the rates of myocardial infarction, stroke and revascularisation by about 25% in these high risk patients, irrespective of their initial cholesterol concentration.

Coronary Heart Disease

In the HPS study simvastatin therapy was associated with reductions in the rates of non-fatal myocardial infarction or coronary death, hospitalisations for unstable or worsening angina, and the requirement for coronary artery bypass surgery or coronary angioplasty. The study population included patients with a past history of coronary disease (i.e. myocardial infarction, unstable or stable angina, coronary artery bypass graft, or angioplasty). The current Australian guidelines state that statin therapy should be commenced in hospital for patients admitted with coronary heart disease events, and all patients with symptomatic coronary heart disease should be commenced on statin therapy at any cholesterol concentration, with the PBS criteria supporting this.

Cerebrovascular Disease

HPS revealed that simvastatin treatment was associated with a reduction in the incidence rate of first stroke and also in the number of participants who, although not having a stroke during follow-up, had at least one episode of transient cerebral ischaemia. There was a reduction in carotid endarterectomy or angioplasty. Eligibility criteria for HPS included a history of transient cerebral ischaemia, carotid endarterectomy, angioplasty, or of non-disabling stroke not thought to be haemorrhagic. The current guidelines state that statin therapy should be initiated for all patients with evidence of symptomatic cerebrovascular disease regardless of their baseline cholesterol levels, and the PBS criteria are in accordance with this.

Peripheral Vascular Disease

In HPS a reduction in the incidence rate of non-coronary revascularisation was found in the simvastatin group. Patients eligible for the study included those with leg artery stenosis (e.g. intermittent claudication) and arterial surgery or angioplasty. It is recommended that patients with evidence of symptomatic PVD should be commenced on statin therapy regardless of cholesterol concentration and the PBS criteria support this approach.

Other Patient Groups

Patients are also eligible for PBS subsidised statin therapy at any cholesterol concentration if they are defined as having high risk diabetes mellitus (aged 60 years or older, or have microalbuminuria, or Aboriginal or Torres Strait Islanders patients), or those with a family history of symptomatic coronary heart disease in two or more first-degree relatives before age 55 years (or in one or more first degree relatives before age 45 years). In other patient groups the PBS criteria stipulate a requirement for a six week trial of diet therapy alone prior to statin initiation, and specified cholesterol thresholds must be met. The current guidelines emphasise that lifestyle interventions, including attention to dietary modification, must underpin lipid management in all people.

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FOR FURTHER INFORMATION – CONTACT THE PHARMACY DEPARTMENT ON 82751763 or email: chris.alderman@rgh.sa.gov.au
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