

GLOSSARY

SCOLIOSIS

A lateral curvature of the spine

Simvastatin plus ezetimibe lowers LDL cholesterol in CKD patients by 40% in 6 months

The first United Kingdom Heart and Renal Protection study established simvastatin as an effective, well-tolerated cholesterol-lowering treatment for patients with chronic kidney disease (CKD). Now, results of the second United Kingdom Heart and Renal Protection study indicate that LDL cholesterol levels in this population can be further reduced by adding ezetimibe, a cholesterol absorption inhibitor, to the simvastatin regimen.

This pilot study included 203 CKD patients randomized 1:1 to receive 20mg simvastatin plus 10mg ezetimibe daily, or simvastatin alone. After 6 months, mean LDL cholesterol levels had decreased [from 3.1 mmol/l (121 mg/dl) to 1.9 mmol/l (72 mg/dl)] in patients receiving combination therapy—a 21% greater reduction than that seen in patients receiving simvastatin monotherapy ($P < 0.0001$). The addition of ezetimibe to simvastatin was well tolerated, biochemically safe, and was not associated with serious adverse events. Diarrhea was more common, however, in the combination treatment group (27%) than in the control group (12%; $P = 0.009$).

Whether these LDL cholesterol reductions will translate to improved cardiovascular outcomes in the CKD population is the subject of a larger randomized trial, the Study of Heart and Renal Protection, which is currently underway. Findings from observational studies of CKD patients, however, do not bode well. A large proportion of vascular diseases in such patients are secondary to uremic cardiomyopathy, not acute myocardial infarction, and therefore might not be mitigated by cholesterol lowering.

Rachael Williams

Original article Landray M *et al.* (2006) The second United Kingdom Heart and Renal Protection (UK-HARP-II) study: a randomized controlled study of the biochemical safety and efficacy of adding ezetimibe to simvastatin as initial therapy among patients with CKD. *Am J Kidney Dis* 47: 385–395

Pilot trial of adrenocorticotrophic hormone for idiopathic membranous nephropathy

Treatment with methylprednisolone plus a cytotoxic drug improves remission rates and

10-year survival in patients with membranous nephropathy, but can have adverse effects. In patients with membranous nephropathy and nephrotic syndrome, Ponticelli and colleagues compared the safety and efficacy of treatment with methylprednisolone plus a cytotoxic agent with that of synthetic adrenocorticotrophic hormone, which has lipid-lowering effects in healthy individuals.

In this multicenter, prospective, randomized pilot trial, patients with biopsy-proven membranous nephropathy were randomized to receive 3 cycles of 1 month of methylprednisolone followed by 1 month of a cytotoxic drug, or treatment with synthetic adrenocorticotrophic hormone delivered intramuscularly twice weekly for 1 year. Remission as a first event was observed in 15/16 patients treated with methylprednisolone and in 14/16 patients treated with adrenocorticotrophic hormone. There were no differences in the incidences of partial, complete or cumulative remissions achieved over the mean 24-month follow-up, or in the median time to response or the median decrease in proteinuria, between the two treatment groups. Treatment was terminated in two patients from each group because of adverse effects or lack of efficacy.

The authors conclude that both methylprednisolone plus a cytotoxic agent and synthetic adrenocorticotrophic hormone safely relieve the symptoms of nephrotic syndrome associated with idiopathic membranous nephropathy. Larger randomized trials with longer follow-up are required to confirm these results.

Kate Matthews

Original article Ponticelli C *et al.* (2006) A randomized pilot trial comparing methylprednisolone plus a cytotoxic agent versus synthetic adrenocorticotrophic hormone in idiopathic membranous nephropathy. *Am J Kidney Dis* 47: 233–240

Scoliosis is prevalent in pediatric solid organ transplant recipients

A Finnish study has revealed that pediatric solid organ transplant recipients are 17 times more likely than children from the general population to develop scoliosis that requires treatment. The researchers recommend that pediatric nephrologists, and other pediatricians, screen for this post-transplantation bone disorder, to aid early referral to an orthopedic spine surgeon if necessary.