European Society of Cardiology (ESC) Congress 2004 & European Association for the Study of Diabetes (EASD) Annual Meeting

Munich, Germany, 28 August – 1 September 2004 (ESC) & 5–9 September 2004 (EASD)

New data highlight the potential of GLP-1 analogue liraglutide

Liraglutide, Novo Nordisk's investigational GLP-1 (glucagon-like peptide 1) analogue, offers improved blood glucose control, weight control and low risk of hypoglycaemia, according to new study data presented at the EASD.

A clinical trial in 144 type 2 diabetes patients compared the effects of liraglutide alone or in combination therapy with metformin to the effects of metformin alone or in combination with glimepiride.

Results presented by Professor Michael Nuack of Bad Lauterberg, Germany, showed that after five weeks patients taking liraglutide alone showed a greater reduction in fasting serum glucose (FSG) compared to those on metformin monotherapy, with a between-group difference of -1.37 mmol/L. Furthermore, of the four treatment groups, those patients taking liraglutide in combination with metformin showed the greatest reduction in FSG.

Professor Nuack explained that weight loss was exhibited in all treatment groups except those patients taking metformin and glimepiride in combination. Furthermore, the group taking liraglutide and metformin in combination showed a significantly greater reduction in body weight relative to baseline compared to the group taking metformin and glimepiride, despite the better glycaemic control observed in the former.

Professor Nuack went on to explain that no major hypoglycacemic episodes were seen in those patients taking liraglutide, either alone or in combination therapy, and although frequent, gastrointestinal adverse effects associated with liraglutide were generally transient.

Natural GLP-1 is rapidly metabolised by the body, and thus is not suitable as a medication. Liraglutide is designed as a long-acting once-daily GLP-1 analogue, and has completed phase 2 clinical trials, with the inititation of phase 3 trials expected by the end of 2004.

Experts highlight the need to tackle HDL cholesterol

At a press conference at the EASD on the management of diabetic dyslipidaemia, a panel of speakers from Europe and the USA highlighted the need for treatment approaches aimed at raising levels of high-density lipoprotein cholesterol (HDL-C) – so-called 'good cholesterol'.

The speakers explained that the treatment of dyslipidaemia should not focus solely on the reduction of low-density lipoprotein cholesterol (LDL-C) – currently tackled using statin monotherapy.

Professor Markolf Hanefeld, from Technical University Dresden, Germany, explained that HDL-C and triglycerides have been shown to be independent predictors of coronary heart disease in patients with impaired glucose tolerance and type 2 diabetes.

Professor Luc van Gaal, from Antwerp University in Belgium, reinforced the point, explaining that in the wake of statins, 'we have forgotten the HDL story'. He explained how the residual risk of cardiovascular disease in type 2 patients who have undergone statin therapy remains around twice as high as that in the corresponding population without diabetes. Professor van Gaal therefore predicted that, in an attempt to address risk factors that are not benefited by statin monotherapy, combination therapy with statins will become the norm in the future.

These recommendations coincide with the worldwide launch of Niaspan, a new formulation of nicotinic acid that, according to manufacturer Merck, retains the proven efficacy of conventional nicotinic acid as an agent for raising HDL-C concentrations and 'successfully addresses the toxicity issues which restricted the widespread use of this important medication'.

Look out for further reports from the EASD in the next issue of Diabetes and Primary Care

DETAIL shows equal renal protection with telmisartan and enalapril

Results of the five-year DETAIL (Diabetics Exposed to Telmisartan And EnalaprIL) study comparing the angiotensin II antagonist (A2A) telmisartan to the angiotensin converting enzyme inhibitor (ACEI) enalapril in renal protection were presented at this year's European Society of Cardiology meeting.

Lead investigator Professor Anthony Barnett, Director of Diabetes and Endocrinology at Birmingham Heartlands Hospital, found the two drugs afforded equal protection to patients with type 2 diabetes with hypertension and early stage diabetic nephropathy against renal disease progression.

The prospective multicentre double-blind, double-dummy study included 250 moderately hypertensive type 2 patients (<180/95 mmHg) aged 35–80 with early nephropathy. Patients were randomised to 80 mg telmisartan or 20 mg enalapril for five years.

Primary endpoint was change in glomerula filtration rate (GFR) over five years; secondary endpoints were yearly changes in GFR, urinary albuminuria excretion rate and serum creatinine, end-stage renal disease, myocardial infarction, stroke, heart failure, and all-cause mortality. Decline in renal function slowed dramatically and was stabilised by both drugs within three years. A mean fall in GFR was seen with no statistically significant difference between compounds.

Mortality from any cause, and from cardiovascular morbidity and mortality in particular, was unexpectedly low. No patients developed end-stage renal disease or needed dialysis. Prescribing of diuretics, other antihypertensives and aspirin doubled over the study period (1997–2004), with a trebling of statin use.

Professor Barnett concluded: 'The study shows telmisartan is a valid choice for first-line therapy in hypertensive type 2 diabetics with nephropathy. In fact, it's fair to say first-line treatment based on the evidence should be an A2A rather than an ACEI in early diabetic nephropathy.'