

Beneficial renal effects of enalapril and nitrendipine in NIDDM

In addition to providing BP control, long-term treatment with enalapril or nitrendipine prevents urinary albumin excretion from increasing over time, and increases the glomerular filtration rate (GFR), in patients with diabetic glomerulopathy associated with noninsulin-dependent diabetes mellitus.

These were the findings of a study by researchers from Italy, in which 16 such patients with micro-albuminuria and mild hypertension received up to 98 days' treatment with nitrendipine (n = 8) or enalapril (short-term study). The dosage of nitrendipine was titrated from 10 to 40 mg/day, and that of enalapril from 5 to 20 mg/day, according to BP response. 14 of the patients subsequently continued treatment for an additional 1 year of follow-up (long-term study).

Sitting diastolic BP decreased significantly in both treatment groups and was similar in the 2 groups at the end of both the short- and long-term studies. At the end of the short-term treatment phase, the geometric mean overnight urinary albumin excretion increased by 47% in the nitrendipine group, but decreased by 51% in the enalapril group. However, at the end of the long-term treatment period, overnight urinary albumin excretion was similar to baseline levels in both treatment groups.

After the short-term treatment period, GFR was similar to baseline levels in both groups. However, GFR had increased significantly in both groups by the end of the long-term treatment period.

The findings seen after long-term treatment with nitrendipine were '*completely unexpected*', note the study researchers.

Ruggenti F, Mosconi L, Bianchi L, Cortesi L, Campana M, et al. Long-term treatment with either enalapril or nitrendipine stabilizes albuminuria and increases glomerular filtration rate in non-insulin-dependent diabetic patients. *American Journal of Kidney Diseases* 24: 753-761, Nov 1994

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