

DIABETIC NEPHROPATHY

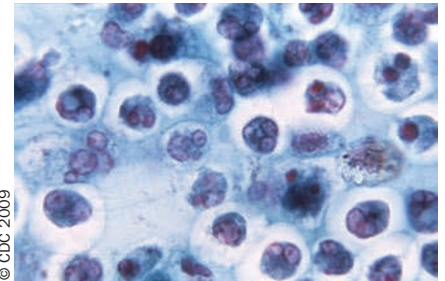
Allergies may promote nephropathy in men with diabetes

New evidence indicates that allergic disorders characterized by eosinophilia may be associated with microalbuminuria in men with type 2 diabetes. Fukui *et al.* report a correlation between the eosinophil count and albumin excretion rate—a marker of diabetic nephropathy—in this population. “Our data suggest a possible link between allergic disease ... and diabetic nephropathy in men with type 2 diabetes,” explain the authors. “To our knowledge, this is the first report of such a relationship.”

The researchers, from the Kyoto Prefectural University of Medicine in Japan, recorded clinical parameters from 783 consecutive patients (416 men and 367 women), including eosinophil count, albumin excretion rate, serum triglyceride concentration and blood pressure. Analysis of data from male participants—using log₁₀ functions to assess correlations between parameters

with skewed distributions—revealed a correlation between eosinophil count and each of systolic blood pressure, serum triglyceride concentration and albumin excretion rate. By contrast, the solitary correlation observed in the data derived from female individuals was between eosinophil count and serum triglyceride concentration. Furthermore, using multivariate linear regression, the investigators found that eosinophil count, duration of diabetes, systolic blood pressure, glycosylated hemoglobin level and serum triglyceride concentration were all independent determinants of albumin excretion rate in men.

The cross-sectional study design did not permit Fukui and coworkers to determine whether high eosinophil counts were causatively related to increased albumin excretion rates in men with type 2 diabetes; however, they speculate that eosinophilia combined with diabetes might be associated with an increased



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risk of development and/or progression of diabetic nephropathy. “The intriguing concept of a role for eosinophils in diabetic nephropathy holds great promise for the development of new preventive measures involving antiallergy agents,” note the researchers.

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Original article Fukui, M. *et al.* Eosinophil count is positively correlated with albumin excretion rate in men with type 2 diabetes. *Clin. J. Am. Soc. Nephrol.* 4, 1761–1765 (2009)