Urinary Albumin Excretion in Patients with Uncomplicated Diffuse Psoriasis

Sir,

An increased urinary excretion rate of albumin (UAE) is found in most patients with untreated or poorly controlled essential hypertension and pre-proteinuric phase of diabetic nephropathy (1, 2). Recently, two studies have demonstrated a high prevalence of microalbuminuria in psoriatic patients even in the absence of coexisting diabetes and hypertension (3, 4). In these studies latent diabetes and atherosclerosis, which might be associated with microalbuminuria, were not excluded, as it was suggested that some patients with psoriasis have disorders of lipid metabolism (5). Clinical nephropathy is unlikely in psoriatic patients without diabetes mellitus and hypertension (6). So it is difficult to explain the increased UAE in psoriasis.

We have investigated the prevalence of microalbuminuria in patients with psoriasis and its relation to the duration and severity of psoriasis. Thirteen women and 12 men (age 18–55 years) with uncomplicated diffuse psoriasis, who had normal oral glucose tolerance and total lipid, cholesterol and triglycerid levels, were included in our study. The mean duration of the disease was 8 years (range 1–35 years) and the mean psoriasis area and severity index (PASI) score 10 (range 2.4–29.1). Twenty-five age- and sex-matched healthy subjects and 25 patients with type-2 diabetes mellitus served as controls. The albustix (Ames) tests of urine were negative for protein, and urinary infection was excluded in all subjects. UAE was measured in 3 consecutive 24-h urine samples with radioimmunoassay. According to the definition agreed upon at a recent conference, values below 20 μg/min were accepted as normoalbuminuria, and persistent microalbuminuria was diagnosed for values betwen 20–200 μg/min in at least 2 out of 3 consecutive urine collections (7). There was no difference in systolic and diastolic blood pressure or UAE between the psoriatic patients and healthy controls ($p > 0.05$). In diabetic patients there was a significant correlation between UAE and diastolic blood pressure ($r = 0.74$, $p < 0.05$) and the UAE, systolic and diastolic blood pressure were significantly higher than in psoriatic patients and healthy controls ($p < 0.05$). There was no significant correlation between UAE and PASI scores ($r = 0.12$) and the duration of the disease ($r = 0.21$).

Our observation indicates that the prevalence of UAE was not high in selected patients with psoriasis vulgaris. The high prevalence of microalbuminuria in the other studies might be due to other factors than the psoriasis itself. However, a long-term follow-up of psoriasis patients, with functional and structural evaluations of the kidneys, will provide further information.

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