Pattern of Proteinuria in Patients with Renal Amyloidosis Secondary to Familial Mediterranean Fever

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Dear Sir,

AA-type amyloidosis secondary to familial Mediterranean fever (FMF) is a frequent cause of end-stage renal disease in certain countries [1,2]. Although the differential diagnosis of AA- and AL-type amyloidosis can be usually made on clinical and laboratory grounds, there are examples of overlapping cases [3]. It is well established that AL amyloidosis is characterized by monoclonal protein production, but overflow proteinuria in the form of monoclonal light-chain protein excretion is also observed under inflammatory conditions [4]. As FMF is a periodic inflammatory disease, we investigated the presence of monoclonal light-chain protein excretion in 16 patients with FMF and renal amyloidosis.

The mean age of the patients was 29 ± 2 years. Twelve were men, and 4 were women. They all had a previous medical history compatible with FMF and a histopathological diagnosis of AA-type amyloidosis on renal biopsy. All patients were receiving colchicine. The amount of proteinuria was measured in 24-hour urine samples, and monoclonal light-chain protein was detected with agar gel immunoelectrophoresis using the same specimen. The results are summarized in table 1.

Lambda and kappa light-chain protein excretions detected in 6 patients were associated with a nonselective proteinuria, and in none of them they were of monoclonal origin.

Immunoelectrophoresis demonstrated the

presence of immunoglobulins in the urine of all these 6 patients. Other patients were characterized by detection of a single band of albumin in the urine.

This study showed that monoclonal light-chain protein excretion is not a feature of FMF and AA-type renal amyloidosis. The presence of light-chain proteins in the urine is associated with nonselective proteinuria as in other glomerular diseases. This noninvasive laboratory test may be of value in the differential diagnosis of patients with FMF and renal amyloidosis when specific immunohistopathological tests are not available.

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