Politeal Cysts in Chronic Hemodialysis Patients

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Dear Sir,

The development of popliteal tumors has recently been reported as a possible manifestation of dialysis-related amyloidosis [1, 2]. This prompted us to carry out a clinical and radiological (ultrasonography and/or CT scan) screening in our hemodialysis patients who were on treatment for more than 60 months.

28 patients were eligible for the investigation; at the time of the study, they had been dialyzed for 127 ± 40 months and solely or mainly cuprophan membranes had been used in all.

11 popliteal masses (maximum diameters 9×5 cm) were detected in 6 (21.4%) of these patients. Table 1 reports the characteristics of these patients; as shown, all suffered from some of the major features of dialysis-related amyloidosis. 10 of the 11 masses were filled with a fluid material, whereas the remaining one appeared dense and partly calcified. In the 3 patients who were investigated by CT scan, cysts could be demonstrated to communicate with the joint cavity (Baker’s cysts) (fig. 1). In 1 of these 3 patients, immunocytochemical analysis demonstrated diffuse β2-microglobulin-amyloid deposition within the synovial wall of the surgically removed cyst. Interestingly, in this patient a β2-microglobulin-positive synovitis of the same knee had been demonstrated.

Table 1. Clinical and radiological features of the patients

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<td>6 f 59 189</td>
<td>yes (bilateral)</td>
<td>no yes (right shoulder)</td>
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Our findings confirm the high prevalence of popliteal tumors in chronic hemodialysis patients, probably secondary to amyloid deposition; conversely, the development of such tumors in these patients would include amyloidosis in the differential diagnosis.

References