Focal and Segmental Glomerulosclerosis Associated with Malignant Mesothelioma

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Dear Sir,

Several types of glomerular lesions had been described in association with malignancies [1]. We describe a patient with malignant mesothelioma and focal segmental glomerulosclerosis presenting with a nephrotic syndrome ; such an association has not been reported.

A 55-year-old farmer was admitted for investigations of nephrotic syndrome and mild renal insufficiency [serum creatinine $157 \mu\text{mol/l}$ (1.8 mg/dl), urea 18.6 mmol/l (52 mg/dl), albumin 20 g/l (2 g/dl)], and 24-hour proteinuria of 8.8 g . Urinalysis revealed microscopic hematuria and granular casts. Radiological investigations showed right pleural effusion, right pleural thickening and four round opacities related to the right pleura. Histological examination of a nodule obtained by open lung biopsy showed a malignant mesothelioma of the epithelial tubular and papillary type. A percutaneous renal biopsy (fig. 1) revealed 11 glomeruli, 3 of which showed segmental sclerosis with focal hyalin-ization in 1 of them. The uninvolved area of these 3 glomeruli and the remaining 8 glomeruli were essentially normal. A mild tubular atrophy and chronic interstitial inflammatory reaction were also noted.

Immunofluorescence studies were negative. Ultrastructural studies revealed diffuse foot process fusion and wrinkling of basement membrane. There were no electron-dense deposits. He received a single dose of carboplatine of 350 mg/m^2 . To treat the persisting nephrotic syndrome he was started on prednisolone 1 mg/kg/day , tapered later to 0.4 mg/kg/day . One week later proteinuria dropped from 7 to 2.6 g/day . The pleural nodules continued to enlarge and he died 1 year after admission.

Fig. 1. Percutaneous renal biopsy.

This case history describes the association of focal and segmental glomerulosclerosis and malignant mesothelioma of the pleura. A pathogenetic relationship would be suggested if the renal lesion regressed following a curative treatment of the underlying malignancy [2]. This goal was not obtained in our case leaving the question of whether this association was causally related or coincidental open for speculation. The response to steroids might indicate the latter. This response is interesting ; we could not find reports documenting the response to steroids of nephrotic syndrome secondary to nonhematological malignancies.

References

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