Carcinoma of the bronchus presenting as renal failure secondary to amyloidosis

Sir,

Tuglular et al. [1] report 287 cases of secondary amyloidosis, with familial Mediterranean fever and tuberculosis as the two major causes. Malignancy was not listed in their table of aetiology, although 11% of the cases were classified as miscellaneous or unknown.

We report a case of amyloidosis secondary to squamous cell carcinoma of the bronchus. A 64-year-old male ex-smoker with a history of chronic obstructive pulmonary disease was referred for investigation of weight loss, fatigue and worsening peripheral oedema. He was normotensive with generalized oedema and signs of right lower lobe consolidation.

Investigations revealed proteinuria of 16 g/24 h, serum albumin 13 g/dl, creatinine 491 μmol/l and urea 14.2 mmol/l. Haemoglobin was 10.0 g/dl with normal haematinics. There was no paraproteinaemia; urine was negative for Bence-Jones proteins. Autoantibodies were negative. Bone marrow was reactive with no evidence of amyloidosis or myeloma. Ultrasound scan identified normal-sized kidneys. Renal biopsy demonstrated amyloidosis on Congo red staining, with immunohistochemical staining of the specimen confirming AA (secondary) amyloidosis.

Chest radiograph showed an area of right lower lobe consolidation. High-resolution CT scan identified a soft tissue mass. Examination of biopsied material confirmed squamous cell carcinoma with AA amyloid deposition.

Renal function deteriorated rapidly and haemodialysis was commenced. He underwent palliative radiotherapy. Five months later he remains on haemodialysis. He is asymptomatic from his pulmonary lesion, with no evidence of metastatic disease. Amyloid has not been demonstrated elsewhere.

Amyloid in association with tumours is usually primary (AL) amyloid and this has been described with bronchial tumours.

Previously published series before the typing of amyloid was available report a 6.1% prevalence of primary and secondary amyloid in association with bronchogenic carcinomas at necropsy [2].

There has previously been one case report of squamous cell carcinoma of the lung presenting as secondary amyloidosis. The patient presented with gastrointestinal symptoms and no evidence of renal involvement until the development of acute renal failure secondary to peritonitis [3].

We present a rarely described association. The high incidence of bronchial neoplasms, with previous studies showing a significant prevalence of amyloidosis within this cohort [2], suggests that the association may be more common.


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