Kimura disease associated with IgA nephropathy

Dear Editor,

A 29-year-old male was hospitalized owing to edema of legs and face. He was suffering from acne for the past 3 months. Color Doppler flow imaging showed several hypoechoic nodules in the right side of the groin and in the abdominal cavity. His laboratory assessments were as follows: high creatinine (112 µmol/L), low serum albumin (19.6 g/L), high cholesterol (11.38 mmol/L), high erythrocyte sedimentation rate (85 mm/h), high white blood cell count (10.37 \times 10^9/L), eosinophilia percentage (0.7%), and high proteinuria (4.55 g/1750 mL/day). Therefore, lymph node biopsy on the right groin area was carried out. Lymph node biopsy (Fig. 1A) indicated what is better in line with the change in eosinophilic lymphogranuloma. Renal biopsy examination (Fig. 1B) revealed immunoglobulin A (IgA) nephropathy-mild focal segmental mesangial proliferation. Two biopsy findings were correlated, and the final diagnosis was IgA nephropathy secondary to Kimura disease (KD). Methylprednisolone was administered at a dose of 48 mg per day. Four weeks later, the laboratory assessments were as follows: 24-h urinary protein (0.08 g/2500 mL), albumin (32.7 g/L), and ESR (6 mm/h). Sufficient hormone treatment for 8 weeks followed by a gradually reduced dose stabilized the conditions of the patient. On follow-up for 13 months, it was found that lymph node enlargement and nephritic syndrome did not recur.

Eosinophilic lymphoid granuloma, also called Kimura disease (KD), is a chronic benign progressive inflammatory disease. Its main pathological changes are vascular lesions and cell infiltration. KD is usually found to affect young men of Asian race, but it is rare in Western countries [1]; hence, it was thought that it is related to the extent of the common genes in the yellow race. It classically presents as a painless subcutaneous slowly growing mass. It may be associated with lymphadenopathy. Concomitantly, increased peripheral blood eosinophilia, and elevated serum immunoglobulin E levels are often observed; therefore, most researchers believed that KD is a kind of proliferative lesion of the

Figure 1. (A) Eosinophils and plasma cells are infiltrated, which is better in line with changes in the eosinophilic lymphogranuloma. (B) Light microscopy shows that glomerular morphology is normal and there is no obvious capillary thickening. Few mesangial cells are proliferated to 3–4 cells per proliferative zone. Mild mesangial matrix expansion is found in the mesangial cells and there is no balloon adhesion.
specific allergic reaction at present [2]. By contrast, there was an assumption that KD may be related to chronic infection. Renal disease is commonly found to be coexisting with this disease, whereas 10% to 12% of patients may suffer from nephrotic syndrome [3].

Many different histologic types on renal biopsy have been described, of which membrane nephropathy and minimal change glomerulopathy are the principle ones [4]. The pathological type of our patient is IgA nephropathy—mild mesangial proliferative glomerulonephritis, it belongs to minimal-change lesions.

KD is benign lesion and its prognosis is excellent. Patients having KD-associated nephrotic syndrome are sensitive to corticoid therapy, but they are likely to relapse. The effect of corticoid depends on the renal pathological types. By prospective study, Viswanatha [5] found that the recurrence rate on patients who accepted only steroid therapy reached 66.6%. In our patient who used only prednisone, lymph nodes and proteinuria disappeared, and KD did not return even after 13 months. Therefore, he is sensitive to prednisone therapy and he should be followed-up further.

References


