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LETTER TO THE EDITORS

Change in C1q deposition in C1q nephropathy

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Sirs,

We read with interest the article entitled "A single-center study of C1q nephropathy in children" by Roberti et al. in the latest issue of this journal [1].

They reviewed the records of 14 children with C1q nephropathy (C1qN) and found a high incidence in pediatric patients (14/264, 5.3%), with variable clinical presentation. Fortunately, it is reported that C1qN, despite a high incidence of steroid resistance and poor renal prognosis in the previous reports, is characterized by a clinically excellent response and fair renal survival with the addition of further immunosuppression. We would like to add information regarding a change in deposition of C1q in parallel with clinical course.

A 1-year-old girl was referred to us from a local hospital because of heavy proteinuria and edema, with a diagnosis of idiopathic nephritic syndrome (NS). She was treated orally with prednisolone for 6 weeks, with no decrease in the amount of proteinuria. A diagnosis of steroid-resistant NS prompted us to perform renal biopsy: the histology showed a minimal change lesion on light microscopy, dominant positive staining of C1q in the mesangium, with lesser extent of C3, immunoglobulin (Ig)A, and IgM, on immunofluorescence microscopy, and the presence of electron-dense deposits in the paramesangial area on electron microscopy. There were no serological or clinical findings indicating lupus nephritis, which frequently mimics C1qN in renal histology. Based on these findings, the pathological diagnosis of C1qN was made. Cyclosporine A (CsA) was chosen to treat her steroid-resistant NS and induced the disappearance of the proteinuria in 2 weeks. Thereafter, continuous oral administration of CsA with trough level of 60-80 ng/ml maintained her remission for 2.5 years until now. The second renal biopsy, which we performed recently to investigate the CsA-induced nephropathy, revealed a minimal change lesion and a faint staining of C1q.

There have been several reports regarding both the clinical and pathological characteristics of C1qN in children [1–5]. In those studies, however, change in C1q deposition revealed by serial renal biopsy was rarely reported. From our experience, we would like to suggest that clinical improvement might alleviate or even cause the disappearance of C1q deposits from the mesangium in C1qN.

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