Allergic Diathesis in Patients with IgA Nephropathy

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Dear Sir,

We report here IgA nephropathy complicated by allergic diseases such as allergic rhinitis, bronchial asthma, or allergic eczema and give an estimation of specific IgE antibodies to cow's milk, egg albumin, soybean, tick, or house dust measured by the RAST technique and serum IgE concentration by the RIST technique (Shionogi Laboratories, Osaka, Japan).

Eighteen (30.5%) of 59 patients with IgA nephropathy and 6 (26.1%) of 23 controls (10 with membranous nephropathy, 7 with mesangial proliferative glomerulonephritis, 3 with membranoproliferative glomerulonephritis, 2 with poststreptococcal glomerulonephritis, 1 with minimal-change nephrotic syndrome) had coexisting allergic disease. However, there is no significant correlation between the two groups.

So, we measured a specific IgE antibody in two groups (41 patients with IgA nephropathy and 17 controls) without complication of allergic diseases. Results regarding antibodies to cow's milk, egg albumin, soybean, tick, or house dust are shown in table I. The number of positive cases of specific IgE antibodies to tick and house dust was significantly higher in patients with IgA nephropathy compared to controls. On the other hand, there were no correlations to food antigens, such as cow's milk, egg albumin, or soybean. Moreover, in IgA nephropathy, serum IgE levels in positive ($n = 14$) or negative ($n = 27$) cases of specific IgE antibodies to tick were 512 ± 108 and 186 ± 46 mg/dl, respectively ($p < 0.01$).

These results show strong allergy when an antigen was inhaled in some patients with IgA nephropathy. Mus-tonen [1] has already reported the concomitance of 7 cases with allergic eczema, 10 with allergic rhinitis, and 3 cases with bronchial asthma out of 184 patients with IgA nephropathy. In the present study, the complication of allergic diseases in IgA nephropathy was demonstrated in 18 cases (30.5%) which, however, was not significant compared to controls. But a high frequency of specific IgE antibodies to inhalation antigens and high levels of se-

Table I. Specific IgE antibodies

n Positive cases of specific IgE antibodies

to

tick house cow's soy- egg

dust milk bean albumin

rum IgE were confirmed in some patients with IgA nephropathy.

It is concluded that inhalation antigens may be an important factor in IgA production through an allergic reaction in the upper respiratory tract. This phenomenon may be similar to reactions against food antigens in the gastrointestinal tract in IgA nephropathy, as we have previously reported [2–4].

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