Comment on the Letter to the Editor by Hillis et al. (Nephron 1995;70:127-128) Integrins in IgA Nephropathy

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Dear Sir,

Hillis et al. emphasized that the antibody which Kanahara et al. describe as FNR is a monoclonal antibody to the β_1 -chain of VLA integrin, that the ligands differ according to the α -chain, as shown in table 1, and that what is referred to as FNR should be called $\alpha_3\beta_1$. In the current Nephron issue, as Hillis et al. underscored, we only mentioned the results for the monoclonal antibody to the β_1 -chain. The results for the α_3 -chain have been published elsewhere [1, 2]. The α_3 -chain was positive in the mesangial region and the loop wall in every case. However, its distribution was predominantly in the loop wall and not in the mesangial region, whereas the α_5 -chain was spread to a greater extent in expanded mesangial regions. The number of cases of α_3 -chain and β_1 -chain do not match because staining with the α_3 -chain antibody was not always possible.

Hillis et al. stressed that the integrin distribution may be fine, but studies of receptor function, adhesiveness, clingingness (?), are necessary. Since we have not been conducting studies in these areas, we think that future studies are needed for clarification.

They point out that black and white photographs are not convincingly expressing distribution, and that in photographs of monoclonal antibodies to the β_1 -chain in normal kidneys the interstitial tissue does not appear to be stained. This is a drawback of black and white photographs, and seems to be a contrast problem.

References

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Kanahara K: Studies on the intraglomerular distribution of extracellular matrix components and integrins in IgA nephropathy (abstract). Med J Hiroshima Univ 1992;40:289-306.