Letters to the Editor

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Mesangial Deposits: Is It a Distinct Pathological Entity?

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Dear Sir,

Two recent papers have dealt with the significance of mesangial IgM deposition in the context of the idiopathic nephrotic syndrome. Kopolovic et al. [1] suggest that the finding of diffuse mesangial IgM deposition constitutes a distinct pathological entity. Nine of their 10 patients presented with the nephrotic syndrome and 1 with microscopic haematuria only. Five of the nephrotic patients were treated with steroids, and 1 of them who showed an 'ill-defined' electron-dense deposit on electron microscopy was resistant to therapy. The renal function has remained normal in all.

On the other hand, Trachtman et al. [2] looked at the histological patterns underlying the early states of disease in children with frequently relapsing steroid-responsive nephrotic syndrome, and they report a high incidence of mesangial IgM deposits (42% of 16 children).

Although we examined this issue from a different angle, our data [3] which compared patients with and without IgM deposits do not support the contention that in the context of the nephrotic syndrome (in both children and adults) associated with normal or virtually normal glomeruli on optical microscopy IgM deposits are related to a distinct clinical presentation, response to therapy, and long-term outcome.

Whether or not IgM deposits constitute a specific finding is debatable, but the general lack of electron-dense deposits found by Kopolovic et al. [1] certainly does not support this notion.

Likewise, the fact that they identified linear deposits of IgG presumably along the peripheral capillary walls points out the need to exert extreme caution in the interpretation of immunofluorescence data in isolation from other findings.

Furthermore, the findings of Trachtman et al. [2] are equivocal, since quite logically they did not biopsy systematically all children presenting with the nephrotic

syndrome. Hence, it is impossible to know whether comparable immunofluorescence findings might not be present in their children who are not frequent relapsers, although their demonstration of electron-dense deposits in 6 of 7 patients with IgM is certainly of interest.

In our view the data from these two papers, our own, and that of others [4] indicate that IgM deposits are not sufficiently characteristic for the term 'IgM nephropathy' to be meaningful from a clinicopathological standpoint.

References

Kopolovic, J.; Shvil, Y.; Pomeranz, A.; Ron, N.; Rubinger, D.; Oren, R.: IgM nephropathy: morphological study related to clinical findings. Am. J. Nephrol. 7: 275–280 (1987).

Trachtman, H.; Carrol, F.; Phadke, K; Khawar, M.; Nicastrì, A.; Chen, C.K.; Tejani, A.: Paucity of minimal-change lesion in children with early frequently relapsing steroid-responsive nephrotic syndrome. *Am. J. Nephrol.* 7: 13–17 (1987).

Vilches, A.R.; Turner, D.R.; Cameron, J.S., et al.: Significance of mesangial IgM deposition in 'minimal change' nephrotic syndrome. *Lab. Invest.* 46: 10–15 (1982).

Yang, J.Y.; Melvin, T.; Sibley, R.; Michael, A.F.: No evidence for a specific role of IgM in mesangial proliferation in idiopathic nephrotic syndrome. *Kidney int.* 25: 100–106 (1984).