Laminin Expression in IgA Nephropathy Kidney Sections from a Patient with a 4-Year Renal Transplantation

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Dear Sir,

A 49-year-old male patient with a 4-year renal transplantation is presented. Immuno-fluorescent examination of renal biopsy sections revealed recurrent IgA nephropathy after 4 years' renal transplantation and 13 months' nephrotic syndrome (fig. 1). The aim of this study was to determine the distribution of laminin in recurrent IgA nephropathy kidney sections from a case of renal transplant with previous nephrectomy due to end-stage IgA nephropathy.

Five kidney sections were examined using alkaline phosphatase antialkaline phosphatase (APAAP) test. Antilaminin (Serotec) was used as a marker for laminin, antifibro-nectin (Serotec) as positive control, OX-8, TBS and RF10 were used as negative controls. The staining pattern was graded by two independent persons as follows: 0 = no staining; 1 = weak; 2 = strong, and 3 = very strong.

Among the macromolecules present in all basement membranes, laminin is the major glycoprotein. It has been shown in numerous studies to present the major noncollagenous glycoprotein of most basement membranes [1], with a molecular weight of about 1,000 kD. Laminin is one of the largest known proteins; because of its size and other properties, laminin has been difficult to study.

The biopsy sections showed a strong staining (+ 3) for mesangial matrix, epithelial and endothelial cells (+2), basement membrane (+3), and interstitium (+2). This case study showed a strong staining of mesangial cells and matrix for laminin which is different from that reported by Madri et al. [2] of

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Fig. 1. Antilaminin against IgA nephropathy kidney section from a patient with a 4-year renal transplant. Note a strong staining for mesangial matrix. APAAP. × 600.

References

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- Madri JA, Roll FG, Furthmayer H, Foidart JM: Ultrastructural localization of fibronectin and laminin in the basement membrane and membranes of the murine kidney. *J Cell Biol* 1980;86:682-687.

laminin labelling which was found uniformly distributed throughout tubular basement membranes, the mesangial matrix, and Bowman's capsule. Whatever the pattern of staining, it indicates a change in glomerular deposition and secretion of laminin. This pattern could be due to the pathological and immunological conditions underlying the disease.

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