A Case of Lipoprotein Glomerulopathy?

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Abstract

Lipoprotein glomerulopathy (LPG) is a rare renal disease characterised clinically by proteinuria and elevated concentrations of lipoproteins and their remnants. Histologically, LPG is characterised by laminated lipoprotein pseudothrombi in glomerular capillary loops. Diagnosis can be challenging owing in part to the rarity of the disease, and electron microscopy can be helpful in identifying the lipid pseudothrombi (Figure 1). The familial occurrence of LPG is recognised, and the disease is primarily associated with APOE gene mutations. LPG is most prevalent in Japan and China, although sporadic reports from other countries are documented. The case presented is of a 50-year-old female who undertook a renal biopsy for investigation of nephrotic syndrome. Whilst the morphology is mostly consistent with LPG, there are some anomalous features associated with the case.

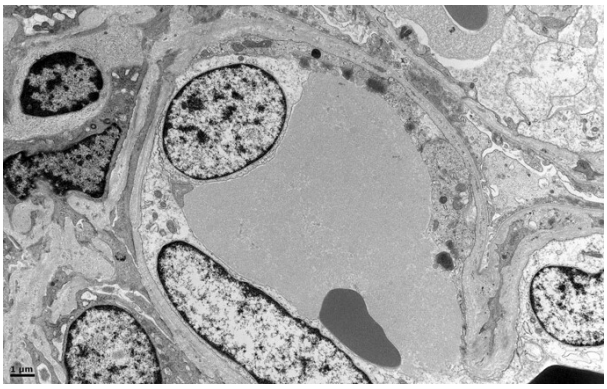

Figure 1. Electron microscopy displays a glomerular capillary loop occluded by an intraluminal lipid pseudothrombus.

References

1. Saito T, Matsunaga A, et al. Apolipoprotein E–related glomerular disorders. Kidney International (2020) 97, 279–288.