Light chain deposition disease in kidney transplantation: a case report

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Background: The light chain deposition disease (LCDD) is a range from normal glomerular morphology to mesangioproliferative to mesangiocapillary to nodular sclerosing patterns. Due to the inconsistencies treatment and the poor graft outcome of LCDD, it is important to investigate for clinching this diagnosis.

Case report: A 53-year-old male was diagnosed end-stage renal disease due to chronic glomerulonephritis and underwent a live unrelated kidney transplantation in 20 years ago. Serum creatinine level gradually increased to 2.41 mg/dL and sub-nephrotic range proteinuria was observed. A kidney biopsy was performed, there are 9 glomeruli, which 3 glomeruli show global sclerosis and remain 6 glomeruli show segmental sclerosis with luminal hyalinosis and hyaline thickening of capillaries. There is no evidence of prominent tubulitis in non-atrophic tubules, vasculitis and capillaries.

Conclusions: Electron microscopic examination showed the characteristic intramembranous, subendothelial and paramesangial granular deposits and detached podocytes and diffuse effacement of foot processes 80%. The spectrum of LCDD has a wide range of differential diagnosis and resulting in potential underdiagnosis.

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