KSN 2019
Seoul, Korea · May 23 - 26

Abstract Type : Poster
Abstract Submission No. : PO-1397

C1q nephropathy and membranous nephropathy in a sibling at the same time.

Sung-min Jung[1], Hyaejin Yun[1], Byoung-soo Cho[1], Hyun-soon Lee[2]
[1]Department of Internal Medicine-Nephrology, Dr.Cho's kidney center, Korea, Republic of
[2]Department of Pathology, Korea pathology Lab, Korea, Republic of

Case Study: C1q nephropathy(C1qN) is a rare glomerular disease especially in children defined by characteristic mesangial immune deposition of C1q with no serological evidence of systemic lupus erythematosus, first described by Jennette and Hipp in 1985. Idiopathic membranous nephropathy(MN) is a rare form of nephrotic syndrome in children, however it is one of the most common cause of primary nephrotic syndrome in adults.
We experienced a typical C1qN in a 8-year-old male with persistent hematuria and proteinuria for 2 months. Laboratory results are as follows: Hb12.1, serum albumin 3.7, cholesterol 152, BUN 11.8, sCr 0.61. Hepatitis and lupus markers were unremarkable. Urinalysis showed protein 2+, and RBC 3+. Spot urine protein to creatinine ratio was 1.748. Renal pathology revealed C1qN. Among 32 glomeruli, 2(6%) show global sclerosis, 5(15%) exhibit cellular and fibrocellular crescents and 5(16%) segmental sclerosis. Ultrastructural examination disclose moderate amounts of mesangial deposits.
We experienced a typical MN in a 7-year-old male patient who took renal biopsy because of nephrotic syndrome, whose older brother was diagnosed as C1qN 1 month ago at our clinic. Laboratory results are as follows: Hb13, serum albumin 1.7, cholesterol 408, BUN 19.5, sCr 0.73, Urinalysis showed protein 2+, and RBC 3+. Spot urine protein to creatinine ratio was 15.92. Renal pathology revealed MN. The glomeruli were moderate to severe increased size and markedly hypercellular involving mesangial cells. Ultrastructural examination disclose diffusely scattered small subepithelial deposits involving mainly the superficial irregularly thickened, rarely forming spikes.
In conclusion, we report rare C1qN and MN in a siblings aged 8 and 7 at the same time. To our knowledge, this is the first case report in a sibling at the same period. Further genetic or environmental studies are mandatory to define the nature of this rare familial case.