

CLINICAL FEATURES AND OUTCOMES OF FOCAL SEGMENTAL GLOMERULOSCLEROSIS PATHOLOGIC VARIANTS IN ADULT TURKISH PATIENTS

Elif Rusen Karabacak¹, Sibel Gulcicek², Serkan Feyyaz Yalin², Selma Alagoz², Meric Oruc², Sinan Trabulus², Mehmet Riza Altiparmak², Nurhan Seyahi²

¹Istanbul University Cerrahpasa Medical Faculty, Internal medicine, Istanbul, TURKEY,

²Istanbul University Cerrahpasa Medical Faculty, Nephrology, Istanbul, TURKEY.

OBJECTIVES

Five subtypes of focal segmental glomerulosclerosis (FSGS) was defined based on light microscopic assessment. Many studies have shown that clinical characteristics and outcomes differ depending on pathologic variants of FSGS. Limited information is available on the prognostic and therapeutic implications of this classification in Turkish patients. The aim of this study was to collect data concerning demographic, clinical, histopathological features, prognostic factors related to renal survival and the distribution of histologic variants of patients with FSGS.

METHODS

This retrospective study evaluated clinical features and outcomes of pathologic FSGS variants in 79 adult patients between January 2005 and January 2014. Demographic information, clinical, laboratory findings, treatment data and information about survival of these patients were obtained from patients files. We analyzed the association of histologic variants with clinical presentation and outcomes.

Table 1. Laboratory data by FSGS pathologic variants

	NOS (n=55)	Tip (n=8)	Perihilar (n=7)	Collapsing (n=6)	Cellular (n=3)
Urea (mg/dL)	43.8 ± 23.86	57.2 ± 39.95	37.71 ± 17.83	66.3 ± 54.4	70.3 ± 67.33
Creatinine(mg/dL)	1.13 ± 0.62	1.42 ± 1.59	1.15 ± 0.44	1.66 ± 0.59	1.49 ± 0.8
GFR (ml/min/1.73 m ²)	85.81 ± 42.8	78.3 ± 42.97	100.53 ± 11.4	91.9 ± 67.4	45.16 ± 27.3
Proteinuria (g/day)	4214 ± 3261	8762 ± 8619	1844 ± 1311	7999 ± 7426	7037 ± 2702
Serum albumin (g/dL)	2.53 ± 1.15	2.9 ± 1.25	4.02 ± 0.53	2.24 ± 1.02	2.34 ± 1.17
Total Cholesterol (mg/dL)	263 ± 96.31	318.6 ± 117.9	199.71 ± 45.9	308.8 ± 149	286 ± 127.97
LDL Cholesterol (mg/dL)	163.48 ± 74.2	225.7 ± 110	130.2 ± 40	240.3 ± 148	205 ± 126.85

RESULTS

A total of 79 patients were investigated. Age at the diagnosis of FSGS was 40.32 ± 16.54. Patients were mostly female (57 %). Hypertension was present 50.6 % of the patients. The frequency of FSGS variants (N=79) was: 3.8% cellular (N=3), 7.6% collapsing (N=6), 10% tip lesion (N=8), 8.8% perihilar (N=7), and 69.9% not otherwise specified (NOS) (N=55).

Laboratory data by FSGS pathologic variants is shown in Table 1. Development of ESRD was associated with low GFR of presentation, presence of tubular pathology, and cellular and collapsing subtypes.

CONCLUSIONS

Use of the classification scheme for FSGS may be clinically useful. Similar to other populations, Turkish adult patients with FSGS have distinct clinical features. We collected important information about clinic presentation and prognosis of FSGS retrospectively. This issue needs to be evaluated in prospective and well defined multicenter studies.

REFERENCES:

1. Korbet SM. Clinical picture and outcome of primary focal segmental glomerulosclerosis. *Nephrol Dial Transplant.* 1999;14 Suppl 3:68-73.
2. Schwartz MM, Korbet SM, Rydell J, Borok R, Genchi R. Primary focal segmental glomerular sclerosis in adults: prognostic value of histologic variants. *Am J Kidney Dis.* 1995 Jun;25(6):845-52.
3. Deegens JK, Steenbergen EJ, Wetzels JF. Review on diagnosis and treatment of focal segmental glomerulosclerosis. *Neth J Med.* 2008 Jan;66(1):3-12.

