American Society of Nephrology

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TITLE: Patient characteristics and renal outcomes of C3G and IC-MPGN in the UK: a retrospective analysis of 287 patients in the UK National Registry of Rare Kidney Diseases (RaDaR)

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GROUP/TEAM:

ABSTRACT BODY:

Background: Membranoproliferative glomerulonephritis (MPGN) is a rare, chronic kidney condition that encompasses immune-complex MPGN (IC-MPGN) and C3 glomerulopathy (C3G). There is limited literature on treatments and outcomes in MPGN.

Methods: This is a descriptive, retrospective study of patients recruited to RaDaR with C3G or IC-MPGN confirmed on biopsy or clinical records. Kaplan-Meier analysis and logrank statistic were used to investigate time to kidney failure and linear mixed effects models to investigate annual estimated glomerular filtration rate (eGFR) slope by disease subtype.

Results: 287 patients were included in these analyses: 135 (47%) had confirmed C3G and 152 (53%) IC-MPGN.

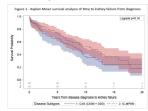
Median age at diagnosis was 14 years for C3G patients and 23 years for IC-MPGN patients. The majority of patients in the C3G and IC-MPGN cohorts were white (74% and 79% respectively). 53% of the IC-MPGN cohort and 45% of the C3G cohort were male.

C3G patients had faster annual eGFR decline compared to IC-MPGN patients (5.1 vs 3.4 mL/min/1.73m2/year), although no significant difference was found in the time from diagnosis to kidney failure (median time to kidney failure 8.3 vs 11.1 years for C3G and IC-MPGN respectively, p-value 0.14, Figure 1).

Of 141 patients with medication data, 51 (36%) were adult and 90 (64%) were paediatric at diagnosis. 58% of these patients were given RAS blockade (ACE-I/ARBs), and 46% were given corticosteroids as their initial treatment (Figure 2).

Conclusion: RaDaR is a large and robust data source allowing investigation into C3G/IC-MPGN natural history. We found heterogeneity of current treatment approaches in this cohort and rapid progression to kidney failure despite current treatments.

(No Table Selected)



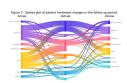


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