

Assessment of Treatment Response of Iraqi Patients with Membranoproliferative Glomerulonephritis with Emphasis on Renal Function and Proteinuria Regression

Faiz Rashid Abayechi (MD CABM, MRCP)¹

Abstract

Background: Membranoproliferative glomerulonephritis (MPGN) is a pattern of glomerular injury with characteristic light microscopic changes. It can be primary idiopathic renal disease or secondary to chronic infections, autoimmune diseases and complements dysregulation.

Objective: To evaluate treatment response in a group of patients with MPGN regarding renal function and proteinuria regression.

Patient and Methods: Thirty three adult patients with MPGN (above the age of 18 years) were included in the study. Males were 19 and females were 14. All patients were followed up for two years. Laboratory investigations included complete blood counts, urine examination, renal function test, lipid profile, virology screen (hepatitis B virus and hepatitis C virus), collagen diseases screen (antinuclear Ab, anti double stranded DNA, extractable nuclear antigens, complements C3 and C4), also screening for multiple myeloma was done with serum protein electrophoresis and urine bence jones protein. All patients were given standard form of treatment (Anti platelets, statins, diuretics, angiotensin converting enzyme inhibitors/angiotensin receptor blockers), some patients were given steroids, others, immunosuppressive drugs. Their responses to treatment were studied and compared.

Results: The cause of MPGN in this study was idiopathic in twenty six patients (79%). It was secondary to HBV, HCV, and systemic lupus erythematosus in seven patients (21%). Four (58%) out of seven patients with normal RFT have partial response to steroid therapy and they showed decreased proteinuria. The remaining three (42%) patients showed no response. Two Patients with normal RFT who received mycophenolate mofetil, responds by decreasing their proteinuria to less than 1 g / 24h. nine patients with impaired RFT received steroid treatment only or steroid plus MMF, four (44%) patients have stabilized renal function, the remaining five (56%) patients had progressive decline in renal function. Three patients with HBV infection who were given alfa interferon or lamivudine showed stabilized RFT and decreased proteinuria. One patient with HCV infection showed progressive decline in renal function, he was maintained on standard treatment only. Two patients with SLE and impaired RFT were given cyclophosphamide and steroid, their RFT stabilized during the follow up period

Conclusion: Patients who presents with normal RFT have better response to treatment. Than patients who presents with impaired RFT. Also patients with secondary MPGN (HBV and SLE) have responded at least partially to antiviral and /or immunosuppressive therapy.

Key words: Membranoproliferative, glomerulonephritis, proteinuria, renal function

Received: 7th April 2015

Accepted: 20th April 2015

¹ Department of Medicine - College of Medicine - Al-Iraqia University -Baghdad – Iraq.