



**COMPARATIVE STUDY BETWEEN SINGLE DOSE RITUXIMAB THERAPY  
VERSUS MULTIPLE DOSE REGIMEN IN IDIOPATHIC MEMBRANOUS  
NEPHROPATHY AND ITS CORRELATION WITH PERIPHERAL BLOOD CD19  
COUNT**

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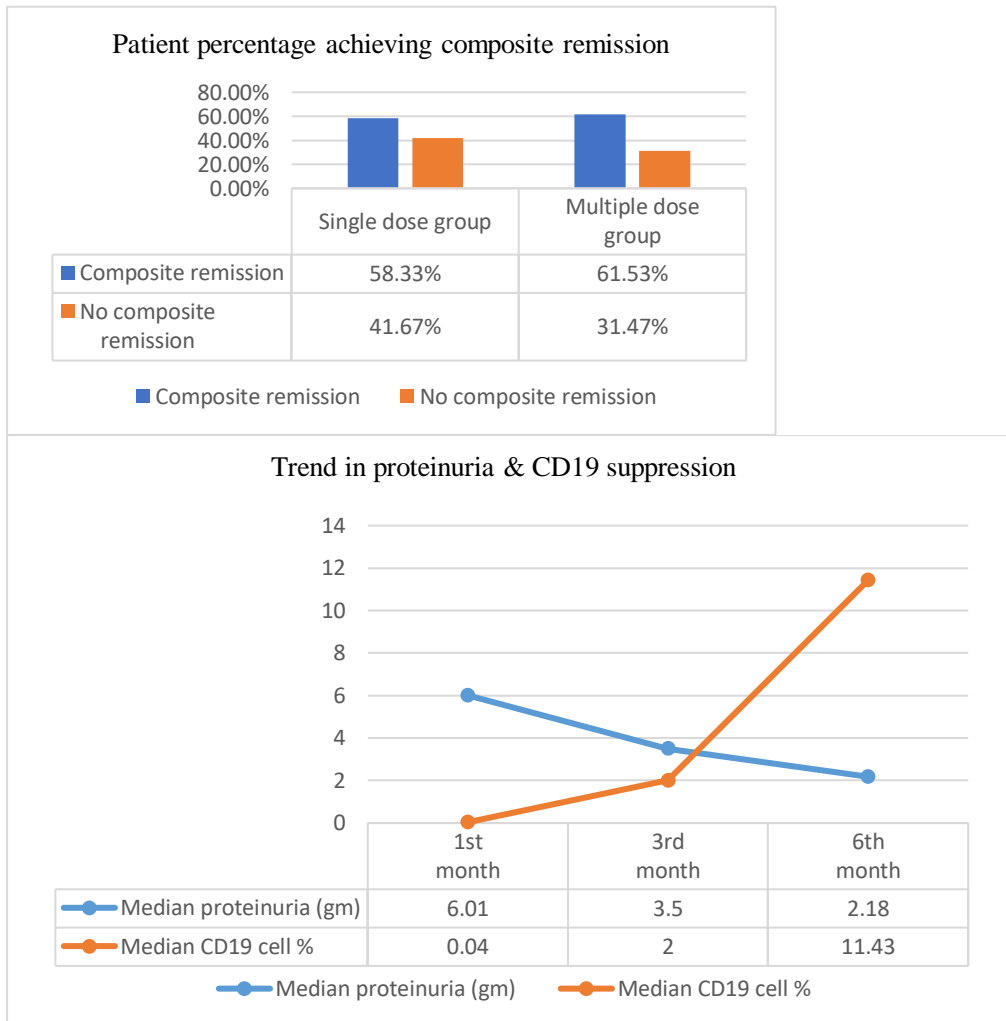
**Introduction:-** Idiopathic membranous nephropathy (IMN) is a very common cause of nephrotic syndrome in adults. Multiple dose Rituximab regimen used in view of safety associated with cost burden. In this study single dose Rituximab therapy has been compared with multiple dose regimen and clinical response has been compared with peripheral blood CD19 cell count suppression.

**Study methodology:-** This is a single centre, prospective, open label, parallel group, interventional study conducted at Department of Nephrology, NRSMCH, Kolkata. Rituximab given at a dose of 375mg/m<sup>2</sup> single dose in single dose group and two doses in multiple dosage group 7 days apart. Follow up period 6 months.

<i>Inclusion criteria</i>	<i>Exclusion criteria</i>
1. Biopsy proven IMN. 2. Anti PLA2R +Ve 3. Age 18-65yrs 4. Eligible for Rituximab as per KDIGO	1. Sepsis 2. Pregnancy 3. Malignancy 4. Chronic viral infection

<i>Primary outcome</i>	<i>Secondary outcome</i>
Patient percentage achieving complete or partial remission by 6 months	1. Change in eGFR at 6 months. 2. Change in serum albumin / cholesterol level. 3. Time to achieve CR or PR 4. Adverse effects

**Study results:-** Both groups showed similar degree of composite remission achievement at 6 months without any difference in adverse effects. Also there was no correlation noted between the clinical response and the degree of B cell suppression. Both groups showed approx. 70% reduction from baseline proteinuria.



**Limitations:-** Small sample size, short follow up period, lack of data on anti PLA2R antibody and onset of COVID 19 pandemic.

**Conclusion:-** Single dose Rituximab is non-inferior to multiple dose regimen in IMN without significant difference in the adverse effect profile. Also there is no correlation between therapeutic efficacy of Rituximab with peripheral B cell suppression.