

## RECURRENT MEMBRANOUS LUPUS NEPHRITIS IN A RENAL ALLOGRAFT TREATED WITH RITUXIMAB.

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Recurrence of membranous lupus nephritis in the renal allograft is rare and treatment options are limited. Rituximab is a chimeric anti-CD20 monoclonal antibody that has proved to be effective in anecdotal reports of native kidney lupus nephritis; however, its use in recurrent lupus nephritis in the allograft has not been reported.

Case: The patient is a 23 year old African American female with end stage renal disease secondary to biopsy proven membranous lupus nephropathy. She received a living related donor kidney transplant in May 2007. She received induction immunosuppression with thymoglobulin (6mg/kg) and was maintained on tacrolimus, mycophenolate and prednisone. An allograft biopsy performed in August 2007 for worsening proteinuria revealed recurrent membranous lupus nephropathy. Double stranded DNA was not detected, C3 level was 70 (83-180) and C4 level was 16 (14-45). Despite RAS blockade, 24 hour protein excretion rose to nearly 19 grams. Four weekly infusions of rituximab 375 mg per square meter body surface area were administered, starting Sept 13, 2007. Four weeks following the fourth dose of rituximab, peripheral blood CD 19 positive cells were 0. Seven weeks following the fourth dose of rituximab, proteinuria decreased by 67% and CD 19 positive cells remained 0. Rituximab-induced remission has been reported in native lupus nephritis. The marked reduction in proteinuria in this short-term follow-up suggests this may be a useful therapy for recurrence of membranous lupus nephritis in renal allografts.