RITUXIMAB: A NOVEL TREATMENT OPTION FOR FIBRILLARY GLOMERULONEPHRITIS?

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Fibrillary Glomerulonephritis (FGN) belongs to a group of disorders characterized by the deposition of fibrils in glomeruli. These fibrils are typically homogeneous and are often composed of IgG4 immunoglobulin subtype, suggesting an underlying B-cell dyscrasia. We speculated that use of an anti-B-cell therapy may be effective in the treatment of FGN.

We present 2 patients who had nephrotic range proteinuria (6 and 4.5 grams /day), along with biopsy findings consistent with FGN. Other causes of paraproteinemias were excluded. Both patients were treated with rituximab 375 mg/ meter^2 weekly for 4 weeks. One patient was treated with concomitant tacrolimus 1mg per day and the other patient with short course of steroids. Standard therapy of proteinuria consisting of renin angiotensin system blockade and strict blood pressure control were employed in both patients. Both patients demonstrated a decline in proteinuria to a level of less than 1.5 grams per day, one at the end of 27 months and the other at the end of 6 month follow-up. Neither patient demonstrated a worsening of their renal function through the course of therapy.

These 2 cases demonstrate that rituximab, an anti-CD20 antibody, might prove to be useful in the treatment of fibrillary glomerulonephritis. While originally used to treat resistant non-Hodgkins lymphoma, rituximab has been used increasingly in the treatment of many different renal diseases such as lupus nephritis, cryoglobulinemia, and membranous glomerulonephritis. This is the first report of the use of anti-B-cell therapy to treat fibrillary glomerulonephritis. These results demonstrate a promising approach to a disease that has been considered refractory to therapy.