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LETTER TO THE EDITOR

Immediate versus long-term effect of rituximab in recurrent focal segmental glomerulosclerosis

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Primary focal segmental glomerulosclerosis (FSGS) recurs in approximately 30–40% of kidney transplants. Recently, several case reports demonstrated the successful use of rituximab for recurrent post-transplant FSGS in adults [1–4]. However, reports of failure of rituximab treatment in this setting have also been published (summarized in Ref. 2). Yabu *et al.* [5] presented a case report of 4 patients with biopsy proven recurrence of FSGS in their renal transplant. After initial treatment with plasmapheresis, all patients received rituximab (2000–4200 mg in 2–6 weeks) 5–11 months after transplantation. In all cases, rituximab failed to have an immediate effect on proteinuria during the following weeks and the authors conclude that rituximab treatment failed to improve nephrotic syndrome in these patients. While these observations are interesting, we find that an immediate reduction in proteinuria may not necessarily be the assumed effect of rituximab. A close look at the presented cases reveals that in the first and the third case, proteinuria decreased slowly over 6 months following rituximab application. The second case presented with collapsing FSGS and was dialysis-dependent shortly after rituximab treatment and therefore may have been resistant to any therapy. The fourth case had a flare of 16 g proteinuria per day prior to rituximab treatment and did not present with further flares for 6 months afterwards. However, at that time point, proteinuria increased again. Therefore, three out of four patients experienced 6 months without a flare in proteinuria, and two out of four patients slowly decreased proteinuria after application of rituximab. It is therefore possible that a potential effect of rituximab was the prevention of additional flares or a slow decrease in proteinuria.

Recently, Meyer *et al.* [1] published a case report of a 29-year-old patient with recurrent FSGS in a second living-related kidney transplant that responded to rituximab with an immediate reduction in proteinuria but more importantly, with a prolonged period without further flares of proteinuria. Other case reports also showed a quick reduction in proteinuria as a measure of successful rituximab treatment [2–4]. However, these cases were successful because after the initial reduction in proteinuria, proteinuria remained low for a prolonged period. Maybe we should focus rather on the long term effects of this experimental treatment in the future. Obviously, controlled studies are needed to address this point for the large cohort of patients with FSGS awaiting kidney transplantation.

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